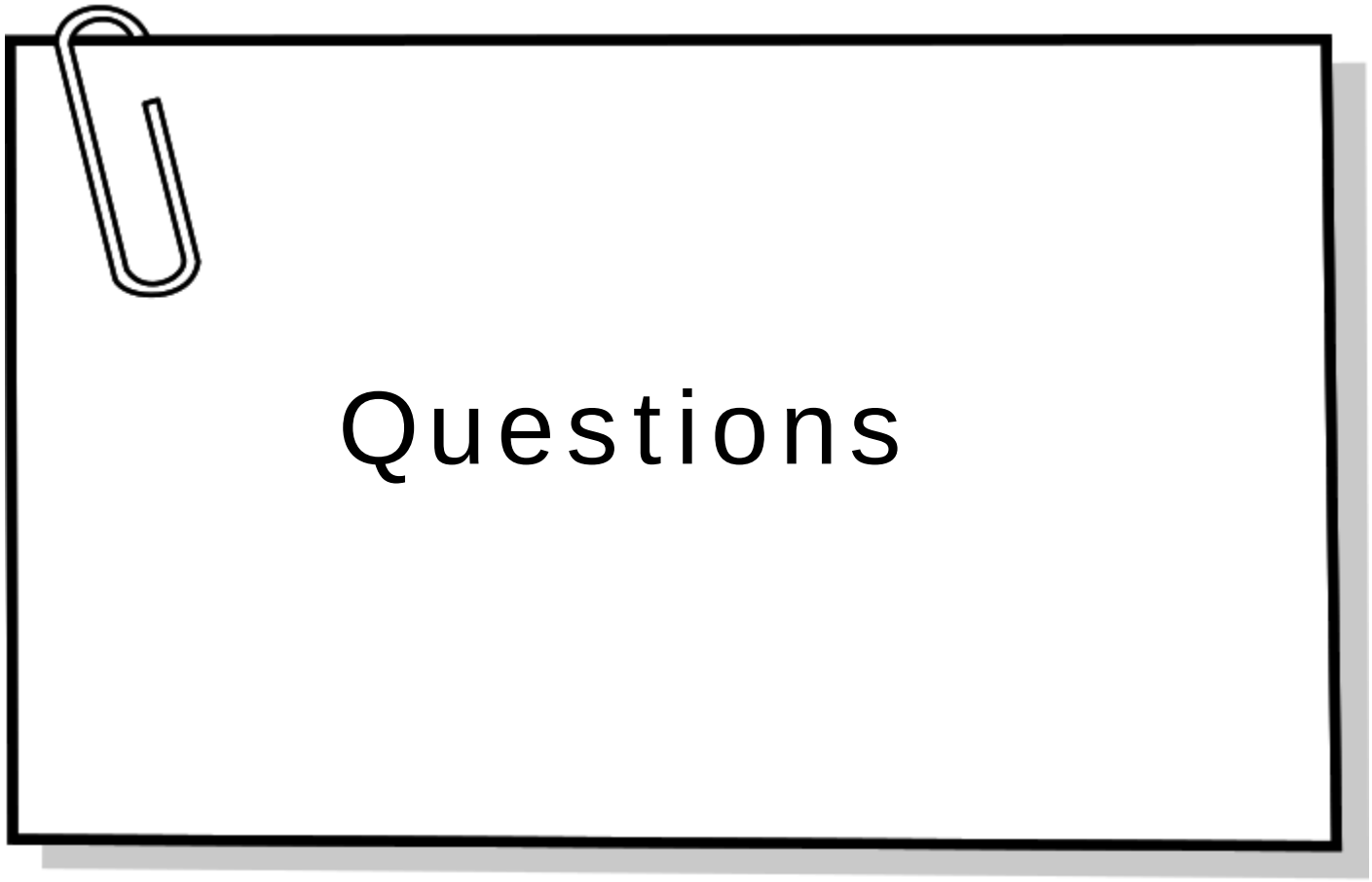
Easy Derma 2016 (1)

By: Huda Ali


Questions

Q Bacterial infections:

1- Pathophysiology, grading, PF, diseases associated, DD, ttt of Hidradenitis suppurativa.
2- Compare: Botryomycosis & actinomycosis
3- Compare: Erysipelas & Erysipeloid
4- Compare: cellulitis & Erysipelas
5- Lower limb cellulitis: causative organism, pathogenesis, PF, DD, ttt.
6- Staphylococcal scaled skin syndrome: etiopathogenesis, CP, management
7- Non-specific bacterial infections of the skin.
8- Pitted keratolysis.
9- Eosinophilic cellulitis.
10- Follicular occlusion tetrad.
11- Folliculitis.
12- CP & management of TEN.
13- Management of necrotizing fasciitis.
14- Coryneform bacteria as commensals & pathogens of skin.
15- Mention 3 diseases of : corynebacterium, staph, strep, & their lab.
16- Pseudofolliculitis
17- Investigations of botryomycosis.

Q Mycobacterial infections:

1- Mention 3 diseases caused by M. tuberculosis.
2- Tuberculosis cutis.
3- Naked tubercle.
4- Orificial tuberculosis: DD, investigations, ttt.
5- Cutaneous tuberculosis: clinical varieties, pathology, management.
6- Tuberculosis verrucosa cutis.
7- Lupus vulgaris: histopathology, diagnosis & ttt.
8- Management of lupus vulgaris.

9- Classification &Clinical types of leprosy.
10- Clinical features of leprosy.
11- Spectrum of leprosy & diagnosis.
12- Borderline leprosy.
13- Clinical manifestations of paucibacillary leprosy.
14- Histopathology of leprosy.
15- Compare: histopathological features of tuberculoid leprosy & lepromatous leprosy.
16- Lepra reactions.
17- Compare: type 1 & 2 lepra reactions.
18- Investigations of lepramatous leprosy.
19- Lab investigation & ttt of multibacillary leprosy& lupus vulgaris.
20- Management & complications of lepramatous leprosy.
21- Diagnostic procedures of suspected case of leprosy.
22- WHO therapy of leprosy.
23- First line of systemic ttt of tuberculoid leprosy.
24- Treatment of leprosy.

Q parasitic infestations:

1- Clinical varieties of scabies & ttt
2- Clinical picture & histopathology of nodular scabies.
3- Atypical presentations of scabies.
4- Cutaneous leishmaniasis diagnosis & ttt.
5- Lab investigation of leishmaniasis.
6- Papular urticaria.
7- Mention 4 diseases of mites.

8- Important test(s) for diagnosis of scabies

Q Viral infections:

1- Mention 4 skin diseases caused by herpes virus group.
2- Causative organism of : warts, molluscum contagiosum, genital herpes.
3- Herpes simplex viral infection.
4- Clinical manifestations of varicella zoster infection.
5- Clinical manifestations of trigeminal herpes zoster.
6- Clinical picture , ttt of genital warts.
7- Epidermodysplasia verruciformis.
8- Histopathological criteria Verruca vulgaris.
9- Mention dosing schedules of different systemic antiherpetic drugs in herpes simplex (oral & genital) & varicella zoster infection
10- Give an account on antiviral drugs.
11- Therapy of varicella zoster infection.

Q Fungal infections:

1- Give account on dermatophytide.
2- Infection with yeast.
3- Discuss tinea capitis
4- Diagnosis of tinea capitis
5- Clinical picture & ttt of kerion.
6- Discuss TVC
7- Mention 4 skin diseases caused by malassezia species.
8- Tinea nigra.
9- Management of a case of tinea unguium.
10- Tinea pedis: predisposing factors, clinical presentation, DD, management.
11- Sporotrichosis.
12- Compare: black piedra & white piedra
13- Compare: white superficial onychomycosis versus disto-lateral onychomycosis.
14- Lab diagnosis of superficial fungal infection.
15- KOH test findings in : dermatophytes, candida albicans, malassezia furfur.
16- How to investigate: mucocutaneous candidiasis, pityriasis versicolor.
17- Treatment of superficial fungal infection in children.
18- Tratment of ringworm infection.
19- Management of pityriasis versicolor.
20- Systemic antifungal ttt.
21- Griseofulvin (mechanism of action, indications, limitations of use, side effects).
22- Systemic first line therapy of choice in tinea capitis, kerion, herpes zoster.

23- Onychomycosis can affect nail plate as well as nail bed: what are different pathogen in such case, different diagnostic methods, different lines of treatments?

Q Hypersensitivity reactions:

1- Types of urticaria & their treatment.
2- Types of physical urticaria.
3- Therapies of chronic urticaria.
4- Diagnosis & management of urticaria.
5- Specific investigations & ttt for hereditary angioedema.
6- Compare histopathologically features of seborrhic dermatitis & psoriasis.
7- The most important investigations in resistant seborrhic dermatitis
8- Aetiopathogenesis of atopic dermatitis.
9- Major & minor criteria for diagnosis of atopic dermatitis.
10- Ocular manifestations of atopic dermatitis.
11- Traetment of atopic child.
12- Pathogenesis & management of atopic dermatitis.
13- Topical ttt of atopic dermatitis
14- Aetiopathogenesis of contact dermatitis
15- Pathogenesis of contact dermatitis of hand.
16- Patch test
17- Compare contact & irritant dermatitis.
18- Erythroderma: causes in adults, complications, management
19- The most important investigations in erythroderma.
20- DD & management of adult erythroderma.
21- Prurigo nodularis: etilogy, microscopic picture, DD, ttt.
22- Compare between acute generalized exanthematous pustulosis & acute generalized pustular psoriasis.

Q Erythema & erythroderma:

1. Erythroderma diagnosis & management
2. Erythroderma: causes in adults, complications, management
3. The most important investigations in erythroderma.
4. DD & management of adult erythroderma.
5. Annular erythema
6. Erythromelalgia: pathogenesis , management.
7. Compare: Well's syndrome & Sweet's syndrome.

Pigmentary disorders:

1- Compare: progressive macular hypomelanosis versus idiopathic guttate hypomelanosis.

2- Discuss acquired hypomelanosis.

3- DD of vitiligo.

4- Diagnosis of hypopigmented macules on the trunk.

5- Topical agents used in treatment of hyperpigmentation.

6- Different fitzpatrik skin types
7- Skin chromophore
8- Pathogenesis of vitiligo
9- Eye manifestations of albinism
10- DD of acquired hypomalanosis

Q Vascular

1- Urticarial vasculitis: pathogenesis, diagnosis, ttt.
2- Henoch-Schonelin purpura
3- Compare: Wegner's granulomatosis & Churg Stauss syndrome.
4- Antineutrophil cytoplasmic antibodies (ANCA)
5- Define & give example of Grenz zone & leucocytoclasis.
6- Specific tests to confirm the diagnosis of : wegner's granulomatosis, Henoch-Schonelin purpura, Cryoglobulinemic vasculitis.
7- Compare: sclerema neonatorum & subcutaneous fat necrosis of the newborn.
8- Management of erythema nodosum.
9- Compare histopathological features of erythema nodosum & erythema induratum.
10- Neutrophilic dermatosis & discuss one of them.
11- Sweet's syndrome
12- Major diagnostic criteria for Henoch-Schonelin purpura & Behcet's disease.
13- Pathogenesis & management of Behcet's disease.
14- Eye manifestations of Behcet's disease.
15- Therapeutic options for pyoderma gangrenosum.
16- Histopathology of malignant atrophic papulosis (Degos disease).

Q Papulosquamous:

1- Histopathological features of psoriasis , lichen planus
2- Nail changes in psoriasis , lichen planus
3- Generalised pustural psoriasis: provocative factors, diagnosis, complications, ttt.
4- Management of pustular psoriasis.
5- Systemic first line therapy of choice in Generalised pustural psoriasis
6- Management of psoriasis.
7- Phototherapy in psoriasis.
8- Role of UVA in ttt of psoriasis.
9- Treatment of pregnant woman with psoriasis.
10- Parapsoriasis.

11- Lichen planus variants.
12- Actinic lichen planus.
13- Lichenoid eruptions.
14- Mention the major diagnostic clinical criteria for oral lichen planus.
15- What is the cause of the bullae formation & the site of cleft in bullous lichen planus.
16- Compare between lichen planus & lichenoid drug eruption.
17- Compare clinically & therapeutically between lichen planus & lichen striatus.
18- Compare clinically &histopathologically between bullous lichen planus & LP pemphigoid.
19- Systemic first line therapy of choice in lichen planus in hepatitis C pt.

20- Compare benign versus malignant acanthosis nigricans.
21- Give an account on acanthosis nigricans

Q Bullous:

1- Skin as an immunological organ.
2- Dermoepidermal junction.
3- Structure of desmosome.
4- Basic principles of desmogleine compensation theory.
5- Site of bullae in : bullous pemphigoid, pemphigus, dermatitis herpetiformis, subcorneal pustular dermatosis.
6- Pathogenesis of cutaneous lesions in mucocutaneous Pemphigus vulgaris
7- Paraneoplastic pemphigus: etiopathogenesis, CP, diagnosis, ttt
8- IgA pemphigus.
9- Treatment of a case of pemphigus.
10- Cicatricial pemphigoid.
11- Dermatitis herpetiformis: how to confirm diagnosis, associated disorders, therapeutic options.
12- Specify the types of epidermolysis bullosa & discuss epidermolysis bullosa dystrophica.
13- Mention the major diagnostic clinical criteria of epiermolysis bullosa acquisita
14- Nail changes in epidermolysis bullosa dystrophica
15- Mention the defect in junctional epidermolysis bullosa .
16- Epidermolysis bullosa pruriginosa
17- Hailey Hailey disease.
18- Describe the immunoflorescence findings (direct & indirect) in autoimmune vesiculobullous diseases.
19- Discuss clinical features of bullous diseases are not enough for diagnosis.
20- Cutaneous manifestations of antiphospholipid syndrome.
21- Chronic bullous disease of childhood.
22- Compare Pemphigus vulgaris versus Paraneoplastic pemphigus .
23- Compare between bullous pemphigoid & epidermolysis bullosa acquisita.
24- Compare between : p. vulgaris, p. vegetans, p. foliaceus & p. erythematosus: clinically &histopathologically.
25- Compare between Hailey Hailey disease & pemphigus vegetans.
26- DD of bullous diseases.
27- Scarring bullous eruptions: etiology & diagnosis.
28- Histopathological DD of subepidermal bullae.
29- Bullous eruption of neonate.

Q Connective tissue diseases:

1- Discoid LE
2- Clinical & histopathological criteria of DLE
3- Chronic DLE variants.
4- Histopathology of LE.
5- Management of DLE
6- Compare: DLE & SCLE.
7- SCLE
8- Major diagnostic criteria of SCLE.
9- Major & minor criteria of SLE.
10- Most important diagnostic tests for SLE
11- How to investigate lupus nephritis.
12- Neonatal LE.
13- Systemic sclerosis: etiopathogenesis, autoantibodies, DD
14- Cutaneous manifestations of dermatomyositis.
15- Nail changes in dermatomyositis.
16- Diagnosis & management of dermatomyositis
17- Serology of connective tissue diseases.
18- Raynaud's phenomenon.
19- Pathophysiology & management of mixed connective tissue disease.
20-Serology of mixed connective tissue disease
21- Major diagnostic criteria of mixed connective tissue disease

Q Metabolic:

1) Compare: primary systemic & primary cutaneous amyloidosis.
2) Diagnostic criteria of lichen amyloidosis.
3) Cutaneous mucinosis.
4) Reticular erythematous mucinosis: HP, DD, management.
5) Metabolic process of porphyria & diseases caused by each defect.
6) Etiology, Clinical features, diagnosis & ttt of porphyria cutanea tarda.
7) Investigations of porphyria cutanea tarda
8) Pseudoporphyria.
9) Compare: porphyria cutanea tarda & congenital erythropeiotic porphyria
10) Compare: porphyria cutanea tarda & pseudoporphyria
11) Xanthomatosis.
12) Xanthelasma.
13) Normolipidemic xanthomas.
14) Clinical types & associations of cutaneous xanthoma.
15) Etiology, CP & management of acrodermatitis enteropathica
16) Most important specific tests for acrodermatitis enteropathica
17) Mention the defect in :

- Congenital erythropeiotic porphyria
- Familial hypercholesterolamia
- Acrodermatitis enteropathica
- Phenylkenuria
- Porphyria cutanea tarda
- Alkaptonuria.

Q Internal medicine:

1) Physiological skin changes of pregnancy.
2) Dermatosis of pregnancy.
3) Herpes progenitalis in a pregnant female.
4) Cutaneous manifestations of liver diseases.
5) Cutaneous manifestations of HCV.
6) Dermatological manifestations of hyperthyroidism.
7) Renal pruritus.
8) Cutaneous manifestations of diabetes mellitus.
9) Pruritus in absence of a visible skin disease.
10) Cutaneous manifestations of internal malignancy.
11) Skin manifestations of HIV.
12) Persistent pruritus.
13) Dermatitis artefacta.

14) Skin manifestations of renal failure
15) PUPPP

Granuloma:

1- Pallisading granuloma.
2- Necrobiotic disorders.
3- Necrobiosis lipoidica.
4- Granuloma annulare.
5- Histopathology of granuloma annulare
6- Sarcoidosis of the skin.
7- Clinical types of cutaneous sarcoidosis.
8- How to investigate a case of sarcoidosis.
9- Histopathological criteria of sarcoidosis.
10- Compare: cheilitis glandularis versus cheilitis granulomatosa.
11- Melkersson Rosenthal syndrome.

12- Important test(s) for diagnosis of sarcoidosis

Lymphoma:

1. Clinical picture of MF
2. Stages & ttt of MF
3. Lymphomatosus papulosis
4. SC panniculitis T-cell lymphoma
5. Role of dermatologist in diagnosis of Hodgkin's
6. Malignant lymphoma vs pseudolymphoma
7. Lymphocytic infiltrate of Jessenervs lymphocytoma cutis

8. Histopathology of MF

Q Hair

1- Describe hair cycle & conditions associated with its disturbance
2- Hair growth promotors.
3- Differential diagnosis of scaly scalp.
4- Give an account on hypertrichosis.
5- Investigative procedures for a case of hirsutism.
6- Give an account on Hirsutism.
7- Discuss alopecia.
8- Trichogram.
9- Discuss cicatricial alopecia.
10- DD of cicatricial alopecia.
11- Give an account on telogen effluvium.
12- Management of androgenetic alopecia.
13- Compare between trichotillomania & alopecia areata
14- Nail finding in alopecia areata.
15- Assessment of diffuse hair falling in a 30 years old female patient.

16- Telogen effluvium: pathogenesis, clinical & lab work up for diagnosis, ttt

Q Acne:

1- Pathogenesis of acne vulgaris.
2- Give an account on acne vulgaris
3- Give an account on Acne variants.
4- Pathogenesis, clinical types & therapeutic modalities in acne vulgaris.
5- Compare between acne conglobata & acne fulminans.
6- Compare between Acneform eruptions & acne vulgaris
7- Compare between neonatal acne & infantile acne
8- Management and Medical ttt of nodulocystic acne.
9- Acneform eruptions.

10- Preoperative considerations of laser ttt of acne scar
11- Compare: AV & drug induced acne
12- Compare: AV & lupus miliaris disseminated faciei
13- CP & management of rosacea
14- Eye manifestations of rosacea
15- Ecrine & apocrine sweat gland: distribution, histological shape, location, mechanism of secretion, diseases affecting them
16- Hyperhidrosis, causes, clinical variants & ttt

Q Genodermatosis :

1. Keratinization & its disorders.
2. Congenital ichthyosis.
3. Acquired ichthyosis
4. Causes of Acquired ichthyosis
5. Ichthyosis hystrix: histological & ultrastructural features, biochemical defect, what are the hystrix like-ichthyosis syndromes & what are biochemical defect
6. Compare ichthyosis vulgaris & X-linked ichthyosis.
7. Compare X-linked & lamellar ichthyosis.
8. Darier's disease
9. Clinical features of Darier's disease
10. DD of Darier's disease
11. Compare clinically & histopathologically : Darier's disease & epidermodysplasia verruciformis.
12. Palmoplanter keratoderma.
13. Clinical types of hereditary palmoplanter keratoderma. Discuss two of them.
14. Porokeratosis
15. Histopathology of porokeratosis of Mibelli
16. DNA instability syndromes.
17. Nail changes in, Darier disease tuberous sclerosis.
18. Eye manifestations of : neurofibromatosis, pseudoxanthoma elasticum.
19. Etiology, CP, DD Ehler Danlos syndrome.
20. Mastocytosis.
21. Clinical picture, histopathology of childhood cutaneous mastocytosis.

22. Adult onset ichthyosis
23. Clinical diagnostic criteria of tuberous sclerosis
24. Compare: punctate keratoderma & pitted keratolysis
25. Histopathology of mastocytoma

Tumors

1. Melanocytic nevi
2. Nevus sebaceous
3. Lentigenosis
4. Bowen's disease
5. Solar keratosis
6. Malignant melanoma in situ
7. Kaposi's sarcoma
8. Basal cell carcinoma : clinical variants, ttt
9. Benign epidermal neoplasms.
10. Leiomyoma, clinical & pathological variants
11. Major diagnostic criteria of dermatofibrosarcoma protuberance.
12. Tumors of sebaceous glands
13. DD of keratoacanthoma
14. HP of syringoma
15. Major diagnostic criteria of basal cell nevus syndrome
16. Angiokeratoma
17. Basal cell epitheliomae
18. Compare: portwine stain vs strawberry hemangioma
19. Kaposi sarcoma vs pseudosarcoma
20. Seborrhic keratosis vs actinic keratosis
21. Becker's melanosis vs nevus spilus
22. Epidermal verrucous nevus vs nevus sebaceous
23. Nevus lipomatosus superficialis vs CT nevus

24. Painful skin tumors
25. Premalignannt skin lesions
26. Milia, clinical types, HP, ttt
27. Peutz-Jeghers syndrome, mode of transmission, CP, complication

Physical:

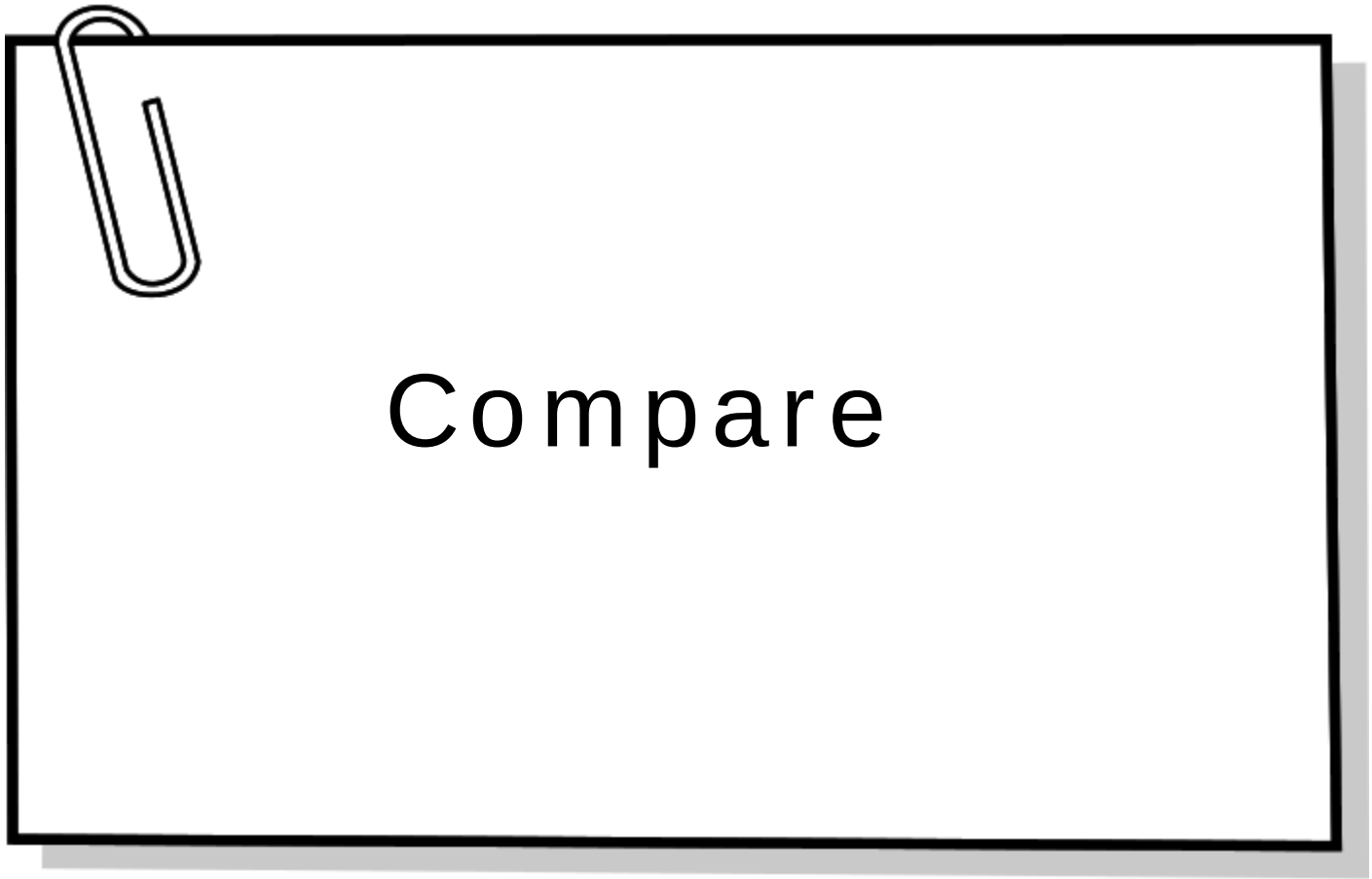
1. Discuss polymorphic light eruption
2. Physiological reaction of skin to sun exposure
3. Skin diseases caused or aggrevated by cold
4. Fitzpatrick skin types & reaction to sun
5. Compare phototoxic & photoallergic dermatitis

1. **Therapeutics:**
2. Systemic retinoids: mode of action, therapeutic uses in dermatology
3. Topical retinoids
4. Methotrexate
5. PUVA
6. Interferone
7. Systemic steroid : mode of action, therapeutic uses in dermatology
8. Topical corticosteroid
9. Dapsone
10. Sunscreen
11. Emollients
12. Photodynamic therapy in dermatology
13. Indications of tetracyclines in skin diseases, mode of action & side effects.
14. Anti-malarials: indications, mode of action , complications
15. Cyclosporin
16. Intensive pulsed light.
17. Topical minoxidil mechanism of action, indications, SE
18. Steroid pulse therapy.

19. Adverse effects and different potency of topical steroid
20. Salicylic acid in dermatology

Others

1. Dermatological diseases of the breast & nipple
2. DD of colored napkins.
3. Skin diseases of the groin.
4. DD papulopastular skin lesions of the face.
5. Hypopigmented macules on the trunk.
6. DD of red face.
7. Notalgia paresthetica
8. Acrocyanosis
9. Perforating collagenosis
10. Polymorphous light eruption: clinical variants, ttt
11. Causes of poikiloderma
12. Clinical picture, HP, DD, management of lichen sclerosis et atrophicus of genital area.
13. Halogenoderma
14. Mechanism of action of botox
15. Characteristics of laser light
16. Different functions of skin
17. Role of x-ray in dermatology
18. Primary perforating skin diseases
19. Dermatosis of nappy area & ttt
20. Infectious diseases of intertriginous area


Compare

	Erythema nodosum	Erythema induratum of Bazin
CP	- The most common cause of panniculitis (septal panniculitis without vasculitis) - Multiple, bilateral, symmetrical, tender, warm, red nodules on shins of tibia, may be on thigh or forearm - Spontaneous healing with bruise-like appearance without ulceration or scarring - Acute course , recurrent - Fever, malaise, arthralgia, leukocytosis	- Usually affects women who have TB - Tender, nodules on the back of lower legs, calves - It may ulcerate → irregular, shallow, bluish undermined edge ulcer, healing with atrophic scar - Persistent or recurrent
Pathogenesis	- Reactive erythema to many etiological factors: streptococcal infection, drugs, sarcoidosis, TB - May be due to immune complex	- It may be tuberculid - Past or active foci of TB may be present
HP	- Deep skin biopsy - Septal inflammatory infiltrate - Septal vascular endothelial swelling - Edema & hge - Predominance of lymphocytes, histiocytes & giant cells - No leukocytoclastic vasculitis - No fat necrosis	- Epitheliod cell tubercles in deep dermis - Proliferation of walls of blood vessels & inflammatory infiltrate (vasculitis) → endothelial swelling + thrombosis → occlusion & necrosis
ttt	1- The cause 2- Bed rest 3- NSAID 4- K iodide	1- AntiTB 2- Dapsone 3- Systemic steroid

Lichen planus	Lichen striatus
- Idiopathic inflammatory disease of skin, MM, hair & nail. - Flat-topped, polygonal, violaceous, shiny papules, Wickham striae, on flexures of wrists, back of hands, glans penis, medial sides of thigh & lumbar region. - Itching is pronounced - Nail: ridging, grooving, longitudinal striations, pterygium, twenty-nail syndrome - Oral lesions: white reticular streaks, white plaques, ulcerative erosions - Hair: lichen planopilaris - Variants: 16	- Self limiting, inflammatory, linear dermatitis, children, along Blaschko lines of one limb. - Band of erythematous, small, flat-topped papules, may have scaly surface, appears suddenly & involutes rapidly - Non-itchy - Nail dystrophy
HP: 1- Orthokeratotic hyperkeratosis 2- Focal hypergranulosis 3- Irregular acanthosis,saw-toothed appearance 4- Liquefactive degeneration of basal cell layer 5- Band-like dermal infiltrate	(Lichenoid tissue reaction) 1- Parakeratosis 2- Inter & intracellular edema wit exocytosis, parakeratosis, dyskeratosis 3- NO acanthosis 4- Basal cell degeneration 5- Heavy perivascular inflammatory infiltrate
ttt: 1- Reassurance & avoid PF 2- Systemic: ➢ Steroid ➢ Antimalarial ➢ Retinoids ➢ Cyclosporine ➢ Dapsone, MTX, PUVA 3- Topical; ➢ Steroid ➢ Tacrolimus 4- Hypertrophic LP → intralesional steroid 5- Oral lesions → mouth wash (triamcinolone), systemic steroid, surgical excision	1- Reassurance 2- Emollients 3- Nail: potent topical steroid under occlusion

	DLE	SCLE
CP	- Well-defined erythematous, discoid plaques with adherent scales & follicular plugging. - Healing →white, atrophic, non-contractile scar, slightly raised or hyperpigmented borders - Scarring alopecia - Sun exposed areas - MM, nail, eye affection	- Prominent photosensitive cutaneous lesions, non-scarring, papulosquamous or annular polycyclic lesions - Healing → grey-white hypopigmentation - Diffuse non-scarring alopecia - Photosensitivity 50% - Above the waist
HP	1- Hyperkeratosis with keratotic plugging 2- Atrophy of s.malpighii 3- Hydropic degeneration of basal cell 4- Thickening of BM 5- Patchy perivascular/periadnexal lymphocytic infiltrate 6- Edema, VD, ESR, colloid bodies in dermis	1- Hyperkeratosis & inflammatory infiltrate are less prominent 2- Hydropic degeneration & edema are more pronounced than DLE
Lab	1- DIF: granular deposits of IgG at DEJ 2- ESR ↑ 3- Leucopenia ↑ 4- +ve ANA in few cases	1- DIF: +ve 60% 2- ANA: +ve 60-80% 3- Circulating immune complexes 4- Anti-Ro, Anti-La Ab
ttt	1- Avoid PF 2- Topical sunscreen & steroid 3- Intralesional steroid 4- systemic: antimalarial- steroid Retinoid- thalidoamide- apsone	1- Avoid PF 2- Topical sunscreen & steroid 3- Systemic: antimalarial- steroid Retinoid- thalidoamide- apsone

Epidermodysplasia verruciformis	PVC
- Rare, familial skin disease, AR, begins in childhood - HPV 5 &8 - Long standing, wide-spread, flat, wart-like lesion on arms, legs, face & back of hands - & Macular erythematous PV-like lesion on face, neck, trunk & arm - May be confluent - Malignant transformation 50%	- Common superficial fungal infection - yeast Malassezia furfur - Sharply demarcated macules covered by branny scales - Color varies from light brown to pink to hypopigmented white - Large confluent areas & oval patches - Affecting seborrhic distribution, upper trunk, neck, upper arm - Axilla & groin → inverse PVC - Moderate itching may be present
ttt: 1- Observation for development of carcinoma & premalignant lesions 2- Sunscreen & avoid excessive sun exposure 3- Oral retinoids 4- Topical imiquimod 5- Surgical, electrosurgical, crytherapy for premalignant lesion 6- Surgery for SCC	A) Topical: 1- Selenium sulfide 2- Zinc pyrithione 3- Imidazoles 4- Allylamines * Hypopigmented lesions: PUVA, steroids B) Systemic (oral): 1- Ketoconazole: 1X1X5-10 d Or single dose: 400 mg 1X1X3d /month for 6 months to prevent relapse 2- Itraconazole: 2X1X5-7 d 3- Fluconazole: single dose 300mg Repeat after2 weeks 300/month for 6 months to prevent relapse

	Acne vulgaris	Lupus miliaris disseminates faciei
CP	- Comedones, papules, pustules, nodules, cysts - Face, chest, shoulders, upper back - Post-inflammatory erythema & pigmentation - May heal with scarring - Seborrhea	- Discrete, reddish papules - Face mainly eyelid, cheeks, upper lip - Absent erythema & telangiectasia - Involutes spontaneously with pitted small scars
HP	1- Comedone → keratinous debris, micro-organism, hair, sebum 2- papules → lymphocytic perifollicular infiltrate 3- Rupture of follicle wall → escape of contents → aggregation of neutrophils → pustules & nodules	1- Large tubercle → epitheliod cells & giant cell 2- Central caseation necrosis 3- Peripheral inflammatory infiltrate
Pathogenesis	1- Increased sebum production 2- Ductal hypercornification 3- Proliferation of P.acne 4- Inflammation	1- No evidence support tubercle etiology 2- It may be related to rasacea
ttt	Anti-acne agents	Tetracycline, minocycline, isotretinoin

Neonatal acne	Infantile acne
- May be present at birth or develop during the 1st few months - More common in males - Mild & regress spontaneously by the age of 6 months - Not associated with significant scarring or increased incidence of acne later in life	- Begins between 3rd & 6th month - More common in males - Severe nodules & cysts & may persist to age of 5 years - Associated with significant scarring or increased incidence of acne later in life - Associated with vililizing tumors
Pathogenesis: - Species of malassezia - Response to topical ketoconazole - Sebum excretion: high level	- Intrinsic hormonal imbalance ↑ testosterone, LH, DHEA

Acne vulgaris	Acneiform eruption
- Comedone, papule, pustule, nodules, cyst - Face, chest, shoulders, upper back - Age: male: 16-19, females: 14-16 - Chronic inflammatory disorder - Acne variants: …. - ttt: anti-acne agent	- Papule, pustule - Not confined to the usual sites - Passing acne age - Sudden onset - Types: … - Resolve slowly with withdrawal of the cause

Tinea imbricata	Erythema gyratum repense
- Fungal infection caused by T.concentricum	- One of the figurate erythema - Associated with carcinoma of lung or beast (Paraneoplastic syndrome)
- Concentric erythematous scaly rings	- Generalized eruption of parallel erythematous bands with annular & serpiginous arrangement with peripheral scaling (Wood-grain appearance)
- Intense pruritus	- Intense pruritus
- Anti-fungal ttt	- Complete resolution after removal of carcinoma

Atopic dermatitis	Pseudoxanthoma elasticum
Eye manifestations: 1- Eyelid eczema 2- Recurrent conjunctivitis 3- Dennie-Morgan infraorbital folds 4- Keratoconus 5- Anterior subcapsular cataract 6- Periorbital darkening	Angioid streaks of fundi of the eye: It occursdue to calcification of elastic fibers in the lamina elastic of Bruch's membrane → fissure & repeated hge → degenerative changes of retina → progressive loss of vision

Nevus spilus	Becker's melanosis
- Benign tumor composed of epidermal melanocytes - Present at birth - Irregular, light brown patch, dotted with small dark brown macules of junctional nevus type	- Benign tumor composed of epidermal melanocytes - Peripubertal (androgen dependent) - may appear before the age of 10 - Large, unilateral, sharply, irregularly demarcated patch showing hyperpigmentation, hypertrichsis, shoulder,chest
Nevus lipomatous superficialis	**Connective tissue nevus**
- Nevoid accumulation of mature adipocytes in the dermis - At birth of first two decades - Multiple, flesh-colored to yellowish, sessile plaques with cerebriform surface or small solitary nodules	- Hamartoma of dermal CT - Collagen, elastic fibers, glycosaminoglycans may be increased or decreased - Slightly elevated, indurated nodules & plaques - Pig skin or cobblestone appearance
Progressive macular hypomalenosis	**Idiopathic guttate hypomelanosis**
- Acquired hypomelanosis - No previous history of infection, trauma, inflammation - Symmetrically, ill-defined, discrete or confluent macules - HP: ↓ melanin pigment in epidermis - Pathogenesis: unkown - Diagnosed clinically by exclusion of other causes	- Acquired leukoderma - Increase with age - Multiple well-circumscribed macules - No scaling or atrophy - ttt: Intralesional triamcinolone Autologous minigraft

Epidermal verrucous nevus	Nevus sebaceous
- Hamartomatous lesion composed only of keratinocytes - Present at or soon after birth - Closely set, verrucous papules, flesh colored to brown color - Anywhere, one side, extremities, trunk - Follows Blaschko's lines - Nevus unis lateris: unilateral - Ichthyosis hystrix: bilateral	- Hamartomatous lesion composed only of sebaceous gland - Present at or soon after birth - Solitary, linear or round, yellow-brown, hairless, slightly elevated plaques - scalp & face - Puberty → verrucous & nnodular - Later → appendage tumors (syringocystadenoma papilliferum, BCC)
HP: 1- Compact hyperkeratosis 2- Acanthosis 3- Papillomatosis 4- Elongation of rete ridges	1- Early: hypoplastic sebaceous glands 2- Puberty: hyperplastic sebaceous glands Hyperkeratosis, papillomatosis
ttt: 1- Surgical excision 2- LASER Ablation	1- Surgical excision

Pitted keratolysis	Punctate keratoderma
- Superficial infection of skin caused by Corynebacterium → keratin degrading proteases - Numerous superficial erosions in st. corneum of sole - Hyperhidrosis	- AD Genodermatosis in which there is hyperkeratosis of skin of palm & sole - Multiple, tender, keratotic papules on palm & sole
ttt: - Topical sodium fusidate ointment - Erythromycin or clindamycin - ttt of hyperhidrosis	 - Topical: 1- Salicylic acid 2- Lactic acid & urea 3- Mechanical debridement - Systemic: 1- Oral retinoids 2- Ttt of 2ry fungal & bacterial infection

	Paget's disease	Eczema
Age	Old	Any age
Sex	Female	Male & female
laterality	Unilateral	Bilateral
Edge	Sharply defined	Ill-defined
Nipple retraction	+ve	-ve
Breast cancer	Intraductal carcinoma	-ve
Itching	-ve	+ve
HP	Large number of paget's cell	Exocytosis + spongiosis
ttt	Modified radical mastectomy	1- Emollient 2- Topical corticosteroid 3- Systemic corticosteroid

	Dermatofibroma	Dermatofibrosarcoma protuberans
	Bening	Malignant
sex	More in females	Equal sex
site	Extremities, legs	Trunk, proximal extremities, head & neck
CP	Small, firm, dome-shaped, single or multiple nodules Skin-colored to reddish brown or bluish black	Solitary, indurated plaque, violaceous, red- brown or flesh-colored Later: multiple, reddish, purple, firm, protuberant nodules
HP	Spindle cells Histiocytes Collagen Capillaries 1- fibrous type 2- cellular type	Spindle dells in storiform pattern
ttt	Surgical removal	Surgical removal Radiation therapy Platelet-derived growth factor

	Scleroderma	scleredema
	CT disease	Metabolic disease
Def	Multisystem disease may be localized to skin (cutaneous sclerosis) or affects internal organs	Rapidly progressive, non-pitting edema& induration of skin
Types	1- Localized (morphea) 2- Systemic (diffuse, limited)	1- Idiopathic 2- Diabetic
Site	Hand, face, trunk	Begins in face, extends to neck, trunk, extremities Sparing palm & sole
CP	Non-pitting edema in hand & feet can't be fully extended Face: edema & fibrosis	Non-pitting edema, indurated body, skin can't be wrinkled, mouth difficult to open
Raynaud's	+ve	-ve
Telangiectasia	+ve	-ve
Scl70	+ve	-ve
HP	Early: inflammatory infiltrate, collagen, mast cells Late: swollen collagen, fibroblast	Excessive dermal mucin, separated by swollen collagen fibers
Systemic affection	Common	Rare
ttt	Steroid Penicillamin PUVA Physiotherapy Plastic surgery	PUVA Cyclophosphamide Corticosteroid

	scleroderma	Pseudoscleroderma
Def	Multisystem disease may be localized to skin (cutaneous sclerosis) or affects internal organs	Diseases have scleroderma-like changes
Types or causes	1- Localized (morphea) 2- Systemic (diffuse, limited)	1- Genetic: proderia 2- Metabolic: PCT, amyloidosis 3- Paraneoplastic: carcinoid 4- GVHD 5- Acrodermatitis chronic atrophican 6- CT: SLE, DM, RA 7- Occupational & chemical: silicosis 8- Itrogenic: silica, isoniazide
Raynaud's	+ve SS	-ve
Sclerodactyly	+ve SS	-ve
Acral lesions	+ve	-ve
Symmetry	symmetrical	asymmetrical
Sclerosis of skin	Edematous, sclerotic	Papules & nodules
Systemic affection	+ve SS	-ve
ANA	+ve	-ve
Scl 70 & anticentromere	+ve SS	-ve
Borrelia	+ve morphea	-ve except ACA
ttt	Steroid Penicillamin PUVA Physiotherapy Plastic surgery	Of the cause

	Atopic dermatitis	Contact dermatitis
CP	Infantile eczema: Edematous, erythematous, patches on cheeks & forehead Childhood: Itchy papules, lichenified plaques, flexures Adulthood: lichenification *Variants:* Cheilitis sicca — juvenile planter dermatosis Ear — ch. Nipple eczema Eyelid — Atopic hand eczema Head & neck — frictional lichenoid eruption *Diagnostic criteria:* **3 Major:** 1. Pruritus 2. Chronic dermatitis 3. Typical morphology & distribution 4. History of atopy **3 Minor:** 1. Early onset 2. IgE 3. Type I HSR 4. Xerosis 5. Ichthyosis 6. Conjunctivitis 7. Keratoconus 8. Cataract 9. Periorbital darking 10. Dennie-Morgan infraorbital folds 11. Cheilitis 12. Anterior neck fold 13. Nipple dermatitis 14. Perifollicular accentuation 15. Non-specific hand & feet dermatitis 16. Environmental & stress 17. Sweating → itching 18. Cutaneous infections 19. Intolerance to solvents 20. Intolerance to food 21. Pallor, p.alba, white dermographism	**Irritant contact dermatitis:** Irritant substance → all subjects → dermatitis Enough time & concentration *Pathogenesis:* Direct toxic effect → damage KC → cytokines → T-cell activation No sensitization No memory **Allergic contact dermatitis:** External sensitizer → sensitized pt → eczematous reaction on repeated exposure Sensitization Cross sensitization Once started is completed Entire skin is sensitized *Pathogenesis:* see next paper Patch test

path	**1- Genetic:** Genes encoding for : ➢ Epidermal ptn: Filaggrin gene, SPINK5 gene ➢ Ptns with immunologic function: β-defensin **2- Environmental:** Pollution, microbes (staph., malassezia) **3- Psychological:** ↑ Eosinophils & IgE with stress **4- pruritus:** Neuropeptide, protease, kinins, IL-31 **5- Epidermal barrier dysfunction:** ➢ ↑protease activity ➢ ↓ filaggrin ➢ ↓lamellar bodies ➢ Change in cornified envelop ptn **6- Immunological:** - Role of dendretic cell: LC →↑Th2, IDEC→ ↑Th1 - T-cell response: Th2 > → IL 4 - 5 – 13 →B-cell → IgE - IgE → mast cell → histamine → VD, edema, itch - IgA ↓→ ↑IgE **7- Vascular abnormalities:** due to VC ➢ Pallor ➢ White dermographism ➢ Low finger temperature	1- Antigen processing & presentation: Hapten →intact st. corneum → bind with epidermal ptn →act as antigen → HLA-DR LC→ pinocytosis → processing → presentation 2- Sensitization LC → LN → sensitization of T-cell → proliferation → homing to skin via CCL27 by basal KC 3- Elicitation: 2nd exposure Presentation of Ag on LC to sensitized T-cell LC & KC → IL-1 IL-1 → T-cell → IL-2, 3 , 4 IL-1 → KC → GM-CSF IL-2 → T-cell → proliferation → IL-3, IFN, GM-CSF → epidermal hyperplasia Mast cell & monocytes → inflammatory mediators Result in: spongiosis, cell injury, death
ttt	1. Primary prevention 2. Educational programmes 3. Avoid triggering factors 4. Reduction of bacterial colonization 5. Skin care 6. Antihistaminic 7. Topical & systemic anti-inflammatory: corticosteroid (MTX- azathioprine- cyclosporine) 8. Phototherapy 9. biologic	1. Avoid triggering factors 2. Reduction of bacterial colonization 3. Skin care 4. Antihistaminic 5. systemic anti-inflammatory: 6. corticosteroid 7. (azathioprine- cyclosporine) 8. Local: - Acute: K permanganate - Subacute: zinc oxide, corticosteroid cream - Chronic : corticosteroid ointment hyposensitization

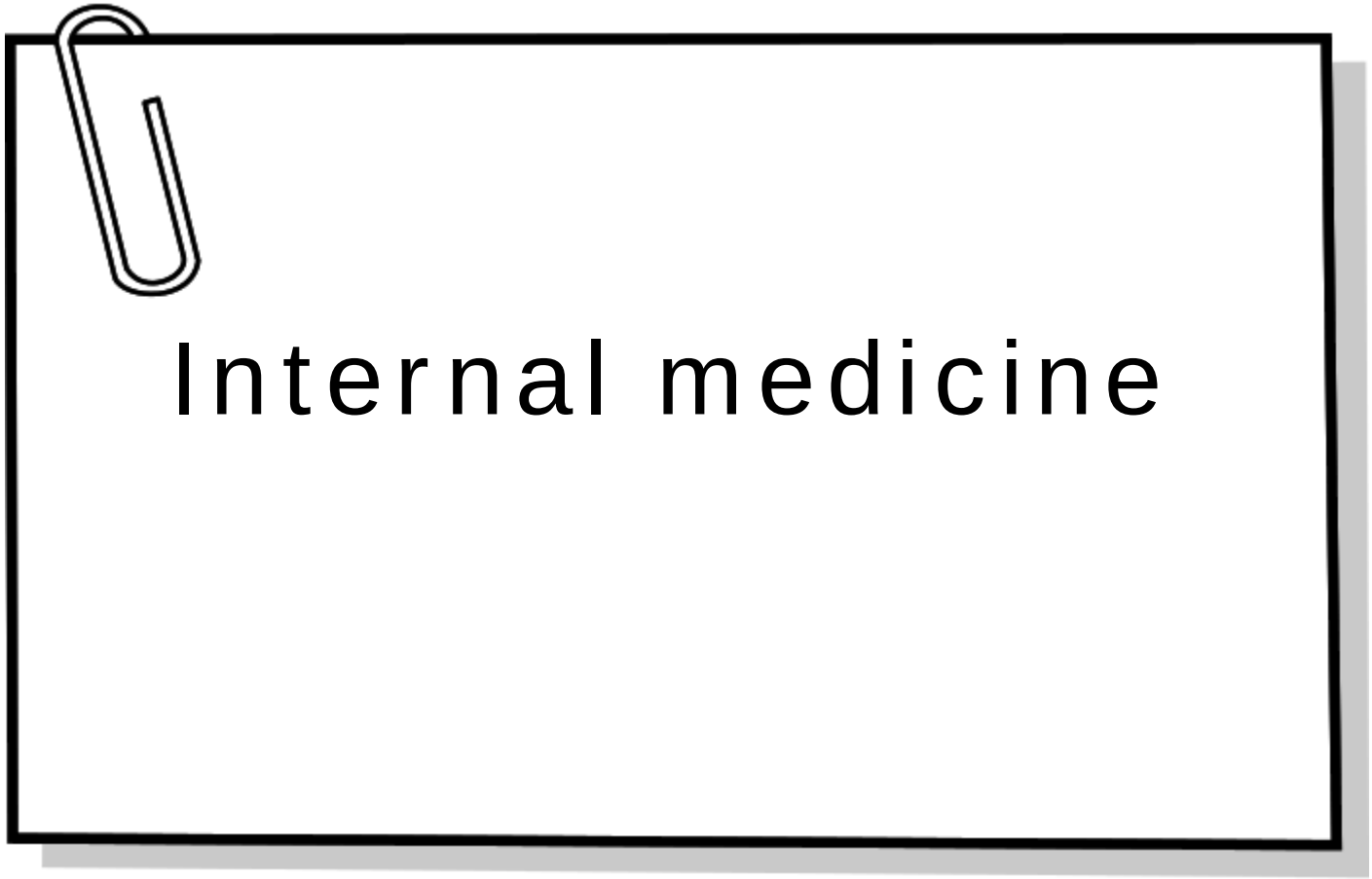
	Scrofuloderma	Lichen scrofulosorum
Etiology	Direct extension to the skin from underlying tuberculous focus, LN, bone, joint, epididymis	Hematogenous dissemination of tubercle bacilli from a distant source → delayed type hypersensitivity response **Tuberculid**
Tuberculin test	+ve	+ve
bacilli	Present in the lesion	Absent in the lesion
CP	Bluish red, nodule → ulcer with bluish undermined edges & floor covered with soft granulation tissue, sinuses & fistulae may present ,	Bilateral, symmetrical, grouped, closely set, minute lichenoid, slightly scaly, reddish brown, perifollicular papules, trunk
Healing	scarring → irregular adherent masses, puckered scarring	Without scarring
HP	Tuberculous granulation tissue with caseation necrosis in deeper tissue, bacilli may be found	Superficial dermal granuloma surrounds follicles & sweat ducts composed of epithelioid cells with some langhans giant cells & a narrow margin of lymphoid cells at the periphery, no caseation
ttt	Antituberculous drugs	

	Lentigines	Freckles
CP	Few scattered, brown to black macules with sharp borders.	Small, brown macules
Site	Occur any where	Sun exposed areas
Sun exposure	Do not darken or increase in number on sun exposure	Deepens their pigmentation
HP	- Increase number of melanocytes in basal layer - Increase amount of melanin in melanocytes & keratinocytes - Mild inflammatory infiltrate - Melanophage in dermis - Moderate elongation of rete ridges - Epidermal hyperplasia	- Hyperpigmentation of basal layer - Normal melanocytes concentration - No elongation of rete ridges - Melanocytes more dopa +ve - More numerous & longer dentritic processes

	Botryomycosis	Actinomycosis
Def	Chronic granulomatous reaction to bacterial infection	Chronic , spreading, suppurative & granulomatous disease
Organism	Staph. aureus , pseudomonas	Actinomycetes Normal mouth inhabitants
PF	- DM - AIDS	- Poor dental & mouth hygiene - Dental extractions
CP	- Limbs, face, perianal - Single or multiple abscesses, containing granules resembling sulphur granules of actinomycosis , breakdown multiple sinuses discharging serous fluid - Healing → atrophic scar	1- Cervico-facial: dull red indurated nodules , multiple sinuses →pus & sulpher granules 2- Thoracic: cough, hemoptysis, night sweats, weight loss, multiple sinuses 3- Abdominal: appendicitis, mass, liver (jaundice), sinus tracts. etc 4- Primary cutaneous: sc nodules on exposed skin with sinuses, LN 5- Pelvic: no skin affection
Diagnosis	Culture to identify the organism	- Sulphur granules (yellow, 1-2 mm)→ bacillary forms, elongated hyphae - Culture : anaerobic incubation at 37°C for 2-4 d or enriched media (Brain- heart infusion glucose agar) → white , glistening, nodular colonies with irregular margins
HP	Granules containing masses of bacteria with surrounding reaction of histiocytes, plasma cells, lymphocytes & FB giant cells	Organism form granular colonies , mycelia filaments, bear club-shaped processes (ray fungus), surrounded by chronic granulomatous infiltrate
ttt	- Flucloxacillin or, - Erythromycin or, - Fucidic acid	- Penicillin G or ampicillin (of choice) - Tetracycline, erythromycin, Chloramphenicol

	Erysipeloid	Erysipelas	Cellulitis
organism	Erysipelothrix rhusiopathiae G +ve, non-motile bacillus	Group A streptococci	Group A streptococci Staph. aureus , H. influenzae
Etiology	Acute cutaneous infection, caused by traumatic inoculation of the organism into the skin, fishermen, persons who prepare meat, poultry, fish	Infection of the dermis & upper SC tissue through wound or small abrasion	Acute, subacute, chronic inflammation of SC tissue
sites	Finger webs, sparing terminal phalanges	Leg & face	Leg & face
CP	*Localized form:* Erythematous- violaceous area of non-suppurative cellulitis, pruritic or painful *Generalized form:* Fever, arthralgia, widespread cutaneous lesions.	High fever,rigors Well-demarcated erythematous, hot, tender swelling of skin, vesicles or bullae, lymphangitis , lymphadenopathy	± fever, chills Ill-define area with erythema, swelling & tenderness
complications	1. Endocarditis 2. Septic arthritis 3. Cerebral & visceral abscesses	1. Recurrence may lead to lymphedema 2. SC abscess 3. Septicemia 4. Nephritis 5. Intracranial sepsis 6. Ocular damage	
ttt	- Penicillin (of choice) - Erytheromycin, cephalosporins, tetracyclines	- Systemic antibiotics: Benzyl penicillin 600-1200 mg IV/6 hr or erythromycin - Rest, analgesics - NSAIDs should be AVOIDED (mask signs of deep necrotizing infections)	

	Kaposi sarcoma	Pseudokaposi sarcoma
Def	Multiple idiopathic hemorrhagic sarcoma	Acroangiodermatitis
	Rare vascular neoplasm	- Rare benign cutaneous condition - Associated with: • Hemodialysis • Arteiovenous shunts • Ateriovenous malformations • Chronic venous insufficiency • HCV
CP	- Bluish- red, dark-brown, nodules & plaques, - Hyperkeratotic verrucous surface - Distal part of lower extremities	- Purple-blue to brown papules & plaques on medial & lateral meleolus - Hyperplasia of pre-existing vasculature - Venous hypertension from severe chronic venous stasis - Itching, ulceration, bleeding
Histopathology : Vascular proliferation (spaces) Vascular hyperplasia CD 43 staining	Lie back to back New vessel formation Endothelial lining & spindle cells	separated from each other by stroma Hyperplasia of existing blood vessels Only endothelial lining
treatment	**Local:** • Excision • Cryocautary • LASER • Photodynamic • Intralesional : sclerotic agent, INFα **Systemic:** • Immunotherapy: INF α • Chemotherapy: vinblastine	• Compression therapy • Leg elevation • Wound care • Surgical correction • Erythromycin • Dapsone


Internal medicine

DM

A) Cutaneous diseases associated with DM:

الوان

Acanthosis nigricans

yellow skin, Eruptive xanthoma اصفر 2

Palisading (NBLD, Generalized GA)

oral leukoplakia, oral LP ابيض 2

Acquired **p**erforating dermatosis

Pigmented purpuric dermatosis

Diabetic **b**ullae, Diabetic dermopathy, Diabetic thick skin

B) Cutaneous infections associated with DM:

1- Bacterial : pyoderma, pseudomonas, Erythrasma, G-ve & anaerobes

2- Fungus: candida- deep fungal infection

C) Cutaneous complications associated with DM:

1- Microangiopathy: thickening of wall of small blood vessels

2- Macroangiopathy: atherosclerosis → atrophy, hair loss, cold, nail dystrophy

3- Neuropathy: neurotrophic ulcer, charcot joints

D) Cutaneous complications of diabetic ttt:

a. *Effects of oral hypoglycemic agents:*

Maculopapular eruptions, generalized erythema, EM, urticaria, lichenoid eruptions

b. *Cutaneous reactions to insulin:*

* Allergic reactions:

1- Immediate local reaction: 15-30 min .Erythema- urticaria- IgE

2- Generalized reaction

3- Delayed HSR

4- Biphasic reaction: immediate & delayed- arthus- immune complex reaction

Others: keloid, papules, purpura, lipoatrophy, lipohypertrophy

Renal

A) Related to multisystem disorder: (5 S, vessel, F N)

- **S**LE - **S**arcoidosis - **S**cleroderma - 1ry **S**ystemic amyloidosis - Tuberous **S**clerosis

- Vasculitis: HSP, PAN, LCV - Fabry's - Neurofibromatosis

B) Related to end-stage renal disease:

** Signs & symptoms:* جلده ينشف و لونه يتغير و يجي عليه فطريات

1- Pruritus

2- Xerosis, acquired ichthyosis

3- Keratotic pits on palm & sole

4- Color changes: pallor, yellow, ecchymosis, hyperpigmentation, uremic frost

5- Onychomychosis & tinea pedis

6- Nail: Muchreke nails, half & half nail, pale nail, splinter he

** Specific disorders:*

1- Perforating disorders: Kyrle's disease

2- Metastatic calcification

3- Bullous diseases: PCT, pseudoporphyria

C) Related to dialysis: 4 P - HANG

1- **P**ruritus

2- Acquired **p**erforating dermatosis

3- **B**ullous dermatosis

4- **P**seudo-PCT

5- Splinter **H**ge

6- **A**cne

7- Uremic **n**europathy

8- **G**ynecomastia

D) Related to transplantation: Increased incidence of infections, cancer, cushing syndrome

Liver diseases 3P LASEX – HUT 3 $

1. Pruritus
2. Pigmentary changes (jaundice, muddy-grey hypermelanosis, chloasma-like)
3. PCT
4. LP
5. Alcoholic cirrhosis
6. Striae distensae
7. Erythema
8. Xanthomatosis
9. Hair & nail: thinning, partial loss of body, clubbing, white flat nail
10. Urticaria
11. Telangiectasia
12. Pseudoglucagonoma syndrome
13. Hepatocutaneous syndrome
14. Gianotti-Crosti syndrome

HCV

Common	Uncommon	Rare
Mixed cryoglobulinemia	Sjogren's	Polyarthritis nodosa
Leukocytoclastic vasculitis	Urticaria	EN
PCT	Lichen plannus	EM
Necrolytic acral erythema	Pruritus	Pyoderma gangrenosa

Malignancy:

A) Malignant involvement of the skin:

1. Metastatic (direct tumor extension, visceral tumor, paget's)
2. Lymphoreticular & hematological : leukemia, lymphoma, multiple myeloma

B) Genodermatosis associated with internal malignancy: (1ry- NMCH نمش)

1. Primary immunodeficiency disorders (Ataxia telangiectasia, Common variable immunodeficiency)
2. Nevoid basal cell carcinoma syndrome
3. NF
4. Muir-Torre syndrome
5. Multiple endocrine neoplasia type III
6. Chromosomal instability: Bloom's syndrome, Fanconi's edema
7. Cowden's disease
8. Howel-Evans syndrome
9. Hemochromatosis
10. Gastrointestinal polyposis: Gardner's syndrome, Peutz-Jeghers syndrome

C) Exposure to carcinogen: arsenical hyperpigmentation, Bowen's disease, superficial BCC

D) Paraneoplastic syndrome (ABCDE- 2 sings)

AN- **A**cquired ichthyosis- **A**cquired hypertrichosis

Bazex syndrome- **B**owen's- **B**ullous eruption

Carcinoid syndrome- **C**utis verticis gyrate

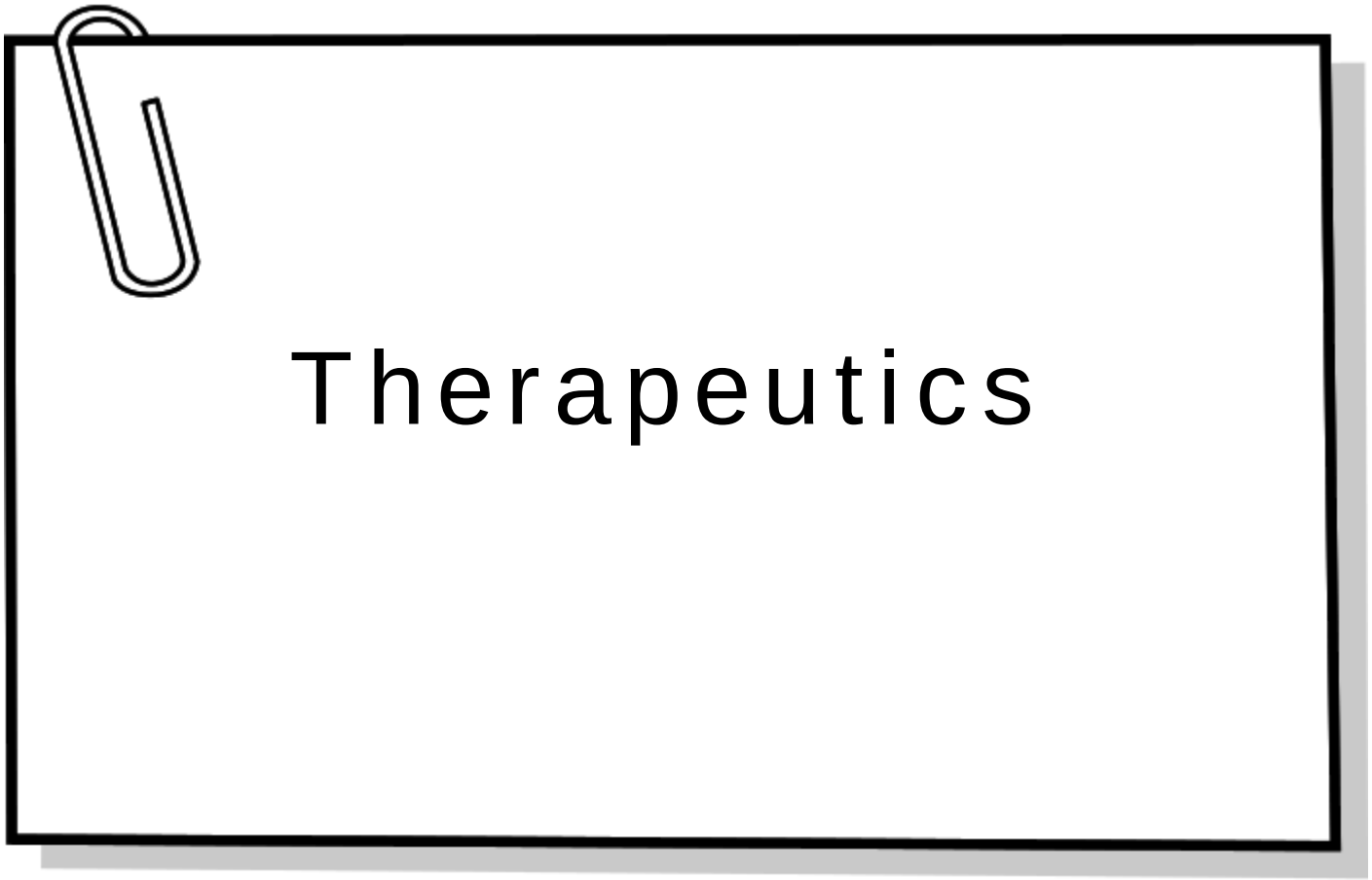
Dermatomyositis –PG

Erythroderma- migratory **e**rythema

Leser-Trelat sign- Trousseau's sign

E) Non-specific lesions: Pruritus- Erythema- Color changes- Urticaria- HZ- Clubbing- Ischemia

Dermatosis of pregnancy				
Intrahepatic colestasis of pregnancy	Impetigo herpitiformis	Herpes gestationis	PUPPP	Atopic eruption of pregnancy
3rd trimester	3rd trimester	2nd ,3rd trimester	3rd trimester	
Generalized Pruritus, jaundice Fetal distress, still birth Abnormal liver function test ↑ bile acid Malabsorption of fat recurrence	Variant of pustular psoriasis Erythema, pustules on flexures Fever , diarrhea, vomiting recurrence sparing face, palm, sole	Pruritic, erythematous, papules, periumbilical → generalized recurrence sparing face, palm, sole	Severely pruritic polymorphous eruption Urticarial papules, plaques , EM-like primigravida resolve after delivery Not usually recurred sparing face, palm, sole	Ezematous eruption in atopic pt No maternal or fetal risk recurrence
HP	As pustular psoriasis With spongiform pustule of Kogoj	Subepidermal separation Basal cell necrosis Eosinophilic spongiosis	Mild spongiosis Superficial perivascular infiltrate with eosinophils	
Lab	Hypocalcemia ESR ↑ leukocytosis	DIF: linear C3, IgG BMZ SSS : roof	IIF -ve	
Pathogenesis - Reduced excretion of bile acid - Gene mutation - Chlestatic effect of estrogen & progesterone Selenium ↓, intestinal permeability ↑		Autoimmune bullous disorder HG factor: IgG 1ab BPAg2- BMZ	Rapid abdominal distension → damage CT → Inflammatory response	Natural switch towards a dominant Th2 reponse worsen the imbalance
ttt Oral ursodeoxycholic acid	Prednisolone Ca++ termination	Topical steroid Anti-Histamine Prednisolone	Topical steroid Anti-Histamine Prednisolone	Topical steroid Anti-Histamine Emollients


Therapeutics

Systemic therapeutics:

1. Corticosteroid
2. Methotrexate
3. Azathioprine
4. Cyclosporine
5. Retinoids
6. Antimalarial
7. Dapsone

Each drug:

1. Indications
2. Contraindications
3. Dose

4. Mechanism of action
5. Metabolism
6. Monitoring

7. Interactions
8. Side effects

Corticosteroid

Indications:

1. Severe dermatitis: AD, CD, photodermatitis
2. Vasculitis: cutaneous, systemic
3. Bullous: Pemphigus, BP, CP, EBA, EM
4. CT: LE, DM, SS, MCTD, severe generalized morphea
5. Neutrophilic dermatosis: sweet's syndrome, Behcet's disease, PG
6. Others: sarcoidosis, LP, paniculitis, urticaria, DRESS

Contraindications

Systemic infections	Active peptic ulcer
DM	Previous steroid myopathy
HTN	Liver failure
Glaucoma	Kidney failure
osteoporosis	History of corticosteroid induced psychosis

Dose:

- Single daily dose: entire dose before 8 am
- Alternate-day dose: maintenance
- Pulse therapy: 1g bolus of methyl prednisolone IV in the morning for 5 days

Classification:

- Short-acting: cortisone, hydrocortisone
- Intermediate-acting: prednisone, prednisolone, methylprednisolone, triamcinolone
- Long-acting: dexamethasone, betamethasone

Mechanism of action:

Anti-inflammatory- Immunosuppressive- Anti-proliferative

Monitoring:

- Baseline: BP, ophthalmic, FBG, fasting triglyceride, potassium, CBC,TB
- Follow up: DEXA scan for hip & lumbar spine
- Pulse therapy: cardiac, electrolytes, glucose monitoring

Complications:

- Steroid withdrawal symptoms: fatigue, nausea, weight loss, postural hypotension
- SE of continued use of large doses: fluid & electrolyte disturbances, HTN, hyperglycemia
- Skin changes: atrophy, alopecia, acneiform eruption, poor healing, purpura, striae, hirsutism

Side effects:

1. CNS: mood & personality changes, psychosis, seizure
2. HPA axis: suppression, withdrawal syndrome, adrenal crisis
3. Eye: cataract, glaucoma, infection, he
4. CVS: HTN, atherosclerosis, edema
5. GIT: nausea, vomiting, peptic ulcer, esophagitis, pancreatitis
6. Gynecological: amenorrhea, fetal effects
7. Hematological: leukocytosis, lymphopenia, eosinophilia, immunosuppression
8. Metabolic: hyperglycemia, hyperlipidemia, hypocalcemia, hypokalemia, obesity
9. Musculoskeletal: osteoporosis, osteonecrosis, muscle atrophy, myopathy

Methotrexate

Indications:

1. FDA-approved: psoriasis, sezary syndrome
2. Proliferative: PRP, PLEVA
3. Dermatitis: AD
4. Vasculitis: leukocytoclastic
5. Bullous: PV, BO, CP, EBA
6. CT: SLE, SS, DM
7. Others: sarcoidosis, keloid, Norwegian scabies

Contraindications:

- Absolute: pregnancy, lactation
- Relative: renal, hepatic, hematologic disorders, DM, infection

Dose:

Tab 2.5mg, 3 divided doses, 12 h interval, 15-25mg/week up to 30mg

+ folic acid 1-2 tab/d except days of MTX

Mechanism of action:

- Immunosuppressive
- Antiproliferative: Folic acid analogue →competitive inhibition of folate reductase enzyme→ ↓DNA synthesis

Metabolism:

- Incomplete absorption from GIT →enterohepatic circulation, bound to albumin
- Milk→↓ absorption, ↑fluids→↑ excretion

Monitoring:

- Baseline: CBC with PLT, LFT , BUN, creatinine

  HIV, hepatitis A, B, C, pregnancy test

- Follow up: CBC with PLT, LFT weekly for 2-4w, monthly for 2-4m, every 3- 4m

  BUN & creatinine every 6-12 months

Monitoring for hepatotoxicity in low risk patients:

1. No baseline liver biopsy, but monitor liver function tests
2. Consider liver biopsy after 3.5-4 g total cumulative dose
3. Consider switching to another agent or discontinuing therapy after 3.5-4 g total cumulative dose

Monitoring for hepatotoxicity in high risk patients:

1. Consider the use of different systemic agent
2. Liver biopsy is done at or near beginning of therapy
3. Repeat liver biopsy after 1-1.5g of therapy

New non-invasive tests to detect hepatic fibrosis:

1. Direct serologic markers of fibrosis: Procollagen type III amino-terminal peptide
2. Indirect serologic markers of fibrosis: AST:ALT ratio, AST:PLT ratio index, fibrotest, ActiTest
3. Imaging: hepatic elastography

Side effects:

1. Hematological: leucopenia, thrompocytopenia, pancytopenia
2. Elevated liver enzymes
3. GIT: stomatitis, vomiting, anorexia
4. Reproductive effects: oligozoospermia, teratogenicity
5. Pulmonary: pneumonitis, fibrosis
6. Dermatological: photosensitivity, alopecia, oral ulcers, necrosis of psoriatic plaque

Azathioprine

Indications:

1. Proliferative: PRP
2. Photodermatitis
3. Vasculitis & Behcet's disease
4. Bullous: PV, BP, CP
5. CT: SLE, DM

Contraindications: Hypersensitivity, infections, pregnancy, allopurinol

Dose: 50mg/day, max: 2.5 mg/kg/d

Mechanism of action:

1. Inhibits purine metabolism & cell division
2. Suppression T-cell function, B-cell antibody production
3. Decreases number of langerhans cells in skin & inhibit ability to present antigen

Monitoring:

- Baseline: CBC with PLT, LFT, urine analysis, Tuberculin skin test, pregnancy t
- Follow up: CBC with PLT, LFT every 2 w for 2 month then every 2-3 months
- Stop therapy WBC < 4000-4500, HB < 10

Interactions:

- Allupurinol → excessive immunosuppression & pancytopenia
- Azathioprine →↓ effectiveness of warfare & IUD

Side effects:

1. Non-melanoma skin cancer
2. Leucopenia
3. Thrombocytopenia
4. Immunosuppression

Cyclosporine

Indications:

1. Psoriasis (with HCV)
2. AD
3. Vasculitis: BD, PG
4. Bullous: PV, BP, LABD, EB
5. CT: SLE, DM, SS

Contraindications:

- Hypertension, renal dysfunction
- Sensitivity, pregnancy, lactation, hepatic, malignancy, other immunosuppressive MTX

Dose: 2.5- 5 mg/kg/day

Mechanism of action:

- Selective immunosuppressive: inhibits T-cell activation, KC proliferation

Monitoring

- Blood pressure, serum creatinine every 2 weeks

Side effects:

1. Nephrotoxicity
2. Hypertension
3. Malignancy
4. Electrolyte imbalance
5. Hyperhidrosis
6. Fatigue & flushing

Retinoids

Types:

- 1st generation: tretinoin, isotretinoin, alitretinoin
- 2nd generation: etretinate, acitretin
- 3rd generation: adapalene, bexarotene, tazarotene

Indications:

*** Systemic retinoids:**

FDA-approved:

- psoriasis (acitretin): pustular, erythrodermic, severe
- Acne (isotretinoin): nodulocystic, acne with tendency to scarring
- Cutaneous T-cell lymphoma (bexarotene)

Non-FDA approved:

- Rosacea & acne related disorders
- Disorders of keratinization: ichthyosis, Darier, PPK

*** Topical retinoids:** acne vulgaris, photoaging, psoriasis, MF, Kaposi sarcoma

Contraindications:

*** Systemic retinoids:**

- Absolute: pregnancy, lactation, hypersensitivity
- Relative: leucopenia, hyperlipidemia, hepatic, renal dysfunction, vitamin A supplements

*** Topical retinoids**: pregnancy, lactation, irritant topical products

Dose: 0.5- 1 mg /kg/ day

Mechanism of action:

- Regulation of keratinization, anti-inflammatory, anti-neutrophilic aggregation

Metabolism : Hepatic metabolism, renal & biliary excretion

Monitoring:

1. Pregnancy test / month
2. CBC
3. Lipid profile
4. Liver function test
5. Renal function test

Interactions: avoid:

1. Alcohol →hyperlipidemia
2. Vitamin A → toxicity
3. Tetracycline → pseudotumor cerebrii

Side effects:

1. Teratogenicity
2. Hyperlipidemia
3. Chelitis, xerosis
4. Headache
5. Hepatotoxicity: ↑ liver enzymes

Anti-malarial

Indications:

- FDA-approved: SLE, RA, malaria
- Others:

1. Granulomatous: sarcoidosis, granuloma annulare
2. Photosensitivity: PCT, PMLE, DM, solar urticaria
3. Lymphocytic infiltrate: lymphocytoma cutis, lymphocytic infiltrate of Jessener
4. Panniculitis: idiopathic, lupus, EN
5. Others: oral LP, psoriatic arthritis

Contraindication:

- Absolute: sensitivity
- Relative: ocular abnormality, blood, hepatic, neurological abnormalities, psoriasis,pregnancy (C)

Dose: Hydroxychloroquin 200-400 mg/d or 6.5mg/kg/d

Mechanism of action:

1. Light filtration: prevent DNA –heat inactivation
2. Immunosupression: inhibits formation of immune comples
3. Anti-inflammatory
4. PCT: molecular complex with porphyrin →↑ excretion

Monitoring:

- Baseline: Ocular, G6PD, CBC, LFT
- Follow up:
  - Ocular / 6 month for 1 year then yearly
  - CBC / month for 3 months then every 3-4 month
  - LFT: 1 & 3 months then every 4-6 months

Side effects:

1. Ocular: corneal deposits, retinopathy (irreversible), visual acuity changes
2. Cutaneous: blue & black pigmentation of skin, MM, nail (reversible), Bleaching of hair
3. GIT: nausea, vomiting, diarrhea
4. Heamatological: heamolytic anemia (G6PD ↓), aplastic anemia, leucopenia, agranulocytosis
5. CNS: vertigo, headache psychosis

Dapsone

Indications:

- DH, neutrophilic dermatosis, leprosy, subcorneal pustular dermatosis
- Others: cystic acne, bullous pemphigoid, vasculitis, PG

Contraindications:

1. G6PD ↓
2. Cardiopulmonary diseases
3. Allergy
4. Pregnancy (C)

Dose: 50-200 mg/day

Metabolism: Hepatic

Mechanism of action:

1. Inhibits neutrophilic tissue damage
2. Impairs neutrophilic chemotaxis

Monitoring:

- Baseline: G6BD, CBC, LFT
- Follow up: CBC / week for 1 month, /2weeks for 2 months, /3-4 months,
  Reticulocytes if anemia LFT/3-4 months
- Assessment: peripheral neuritis, peripheral motor functions

Side effects:

1. Hematological: hemolytic anemia, methemoglobinemia, leukopenia, agranulocytosis
2. Hypersensitivity syndrome: fever, hepatitis, generalized cutaneous eruption
3. Peripheral neuropathy (foot drop)
4. Gastric irritation
5. psychosis

Anti-histamines

Types:

A) Sedating agents (first-generation H1 antihistamines):

1. Alkylamines: bromopheniramine maleate, chlorpheniramine maleate
2. Ethanolamines: diphenhydramine hydrochloride, clemastine fumarate
3. Phenothiazines: promethazine, trimeprazine
4. Ethylenediamines: tripelennamines hydrochloride, pyrilamine maleate
5. Piperazines & piperidines: hydroxyzine, cyproheptadine

B) Non-sedating agents (second generation H1 antihistamines):

1. Fexofenadine
2. Loratidine
3. Cetirizine
4. Levocetirizine
5. Ketotifen

C) H2 antagonist:

1. Cimetidine
2. Ranitidine

Therapeutic uses:

1. Urticaria, dermatitis & pruritus
2. Systemic anaphylaxis & angioedema: adjuvant role
3. Allergic rhinitis, Motion sickness, Parkinson disease

Toxicity:

1. CNS: drowsiness, dizziness, fatigue, irritability, insomnia
2. GIT: loss of appetite, nausea, vomiting
3. Dermatological: vasculitis, photoallergic
4. Hematological: BM depression

Biologic therapy

- Group of medications target specific step in the pathogenesis in several immune mediated disorders, they are genetically bioengineered

Mechanism of action:

1. Blocking T-cell activation (Alefacept - Efalizumab)
2. Elimination of pathogenic T-cell (Alefacept)
3. Blocking TNFα (Etanercept – Infliximab)

Dose:

1. Alefacept: 7.5 mg IV or 15 mg IM once weekly for 12 weeks,
   repeated course may be given after 12 weeks rest period.
2. Efalizumab: 1 mg/kg SC once weekly for 11 weeks
3. Etanercept: 25-50 mg SC twice weekly for 12 months
4. Infliximab: 3-5 mg/kg IV infusion over 2 hours at weeks 0, 2, 6

Indications:

1. Psoriasis
2. Psoriasis with arthropathy
3. Rheumatoid arthritis
4. Crohn's disease

Side effects:

1. Increased risk of infections (esp. TB)
2. Blood disorders
3. Malignancy
4. Skin irritation & rash

Monitoring:

1. Screening for infections (TB, HBV, HIV)
2. Liver function tests
3. CBC

Topical therapy

Topical calcineurin inhibitors

They are anti-inflammatory agents that allow treatment of inflammatory dermatosis without side effects of topical corticosteroids.

Pimecrolimus differs from corticosteroids:

1. Selectively targets T-cell & mast cell
2. No induction of atrophy
3. Permeates much less

Mechanism of action:

1- Tacrolimus & pimecrolimus are inhibitors of the phosphatase calcineurin.

2- T-cell activation →↑ free Ca++ →binds to calmodulin → activates calcineurin

3- Calcineurin→ dephosphorylate the cytoplasmic subunit of nuclear factor of activated T-cell →translocate to nucleus → cytokines

4- Tacrolimus & pimecrolimus + FK506-binding ptn →complexs → inhibit calcineurin

Side effects:

1. Burning, stinging, sensation of warmth
2. Allergic contact dermatitis
3. Rosacea-like granulomatous reaction

Indications:

1. FDA- approved: atopic dermatitis
2. Other inflammatory dermatosis (steroid-sparing agent): Psoriasis, LP, vitiligo

Topical corticosteroids

Mechanism of action:

1- Anti-inflammatory:

- ↓ Neutrophil & monocyte accumulation at site of inflammation
- ↓ Antigen presentation of dendritic cells to t-cell

2- Immunosuppressive:

- Block release of lymphokines &IFN-δ from T-cell
- ↓ T-cell proliferation

3- Antiproliferative: ↓DNA synthesis

4- Vasoconstrictive eefect

Classification:

- Class I (superpotent):e.g. Betamethasone dipropionate gel & ointment 0.05%
- Class II (High potency): e.g. Triamcinolone acetonide ointment 0.5%
- Class III (High potency): e.g. Triamcinolone acetonide ointment 0.1 %
- Class IV (Medium potency): e.g. Betamethasone valerate foam 0.12%
- Class V (Medium potency): e.g. Betamethasone valerate cream & lotion 0.1%
- Class VI (Low potency): e.g. Hydrocortisone, prednisolone

Indications:

- Dermatitis (atopic, contact, seborrheic, stasis, nummular eczematous)
- Psoriasis, lichen plannus, lichen striatus
- Granuloma annulare, NBL, sarcoidosis
- Pemphigus , Hailey-Hailey disease
- DLE, vitiligo

Side effects:

Systemic: (large area, under occlusion, inflamed skin, children)

- Endocrine: Cushing disease
- Metabolic: hyperglycemia, osteopathy, adrenocortical suppression
- Electrolytes imbalance: edema, hypocalcemia, hypertension
- Ocular: cataract, glaucoma

Cutaneous:

- Atrophic changes: atrophy, telangiectasia, purpura, striae, ulceration, bruising
- Infections: masking (tinea incognito), ↑candidiasis & HSV
- Ocular: cataract, glaucoma, hypertension
- Pharmacologic: rebound, addiction, tachyphylaxis
- Miscellaneous: steroid acne & rosacea, perioral dermatitis, hypo& hyperpigmentation

Sunscreens

Sunscreens are pharmaceutical preparations that attenuate UV wavelengths that may lead to photobiologic changes.

Mechanism of action:

1. Absorb photons
2. Scatter photons
3. Combination of both

Application:

1. Apply ½ hour before sun exposure.
2. 30 ml or two tablespoons.
3. To improve compliance: apply twice or use twice the SPF desired.

Active ingredients:

1- Physical	2- Chemical
Titanium dioxide, talc, Zinc oxide	PABA & PABA esters, benzophenones
Scattering agents	Absorbing agent
Opaque barrier	Non-opaque
Cosmetically unacceptable, discolor clothes	Colorless
Limited protection for few hours	Protection after bathing or perspiring
Promote milia & folliculitis	

3- Other agents: dihydroxyacetone, iron oxide, antioxidants

Efficacy: depends on vehicle, pH stability, SPF, type of skin environment

Determination of SPF:

$$SPF = \frac{\text{MED-protected}}{\text{MED-unprotected}}$$, MED: minimal erythema dose

Adverse effects: skin irritation, allergic contact dermatitis, block vit D synthesis

Salicylic acid in dermatology

Clinical uses:

1. Wart & callus
2. Scalp psoriasis or seborrheic dermatitis
3. Plaque psoriasis & hyperkeratosis
4. Ichthyosis, PPK, PRP
5. Acne vulgaris
6. Non-surgical means of toe-nail avulsion
7. Tinea infection (whitfield ointment)

Mechanism of action:

1. Keratolytic : alteration of corneocyte adhesion by disrupting desmosomal ptns
2. Mild anti-inflammatory & antipruritic
3. Antimicrobial

Side effects:

1- Systemic absorption→ salicylism

- ↑ absorption in: erythroderma, large surface area, hydrophilic oint., under occlusion

- CP: tinnitus, hearing loss, CNS toxicity, respiratory alkalosis, metabolic acidosis

2- Contact dermatitis

Pregnancy category C

Mechanism of action of botox in dermatology:

Botulinum toxin acts by binding presynaptically to high-affinity recognition sites on the cholinergic nerve terminals & decreasing the release of acetylcholine, causing neuromuscular blocking effect. Major indications of Botulinum toxin in dermatology are Hyperkinetic facial lines (glabellar frown lines, crow's feet) & focal hyperhidrosis.

Botulinum toxin not only acts as a potent inhibitor of acetylcholine but also as an inhibitor of substance P and of glutamate as well. By those mechanisms, it may be antipruritic, which may help explain its benefits in lichen simplex and dyshidrotic hand eczema.

In Hailey-Hailey disease, facial eccrine hidrocystomas, salivary fistulas, and intrinsic rhinitis, Botulinum toxin blocks the secretion of sweat/saliva/mucus.

Wood's light

Description:

This is a source of UVL from which nearly all visible rays are excluded. It is composed of the filter (Wood's glass) , Light source

Uses:

1) Infections:

a. Fungal: - Pityriasis versicolor: golden yellow

- Tinea capitis green fluorescence

b.Bacterial: - Corynebacterium minutissimum (erythrasma)

- Propionibacterium acne (acne)

- Pseudomonas yellow green

c. Parasite: scabies

2) Pigmentary disorders:

- Differentiation between dermal & epidermal pigmentation e.g. vitiligo & nevus anemicus

- Detection of ash leaf macules in tuberous sclerosis

3) Metabolic disorders: Porphyria (pink fluorescence)

4) Tumors: - Photodynamic diagnosis - Photodynamic therapy

5) Drugs & chemicals:

- Can be added to topical medication to detect missed areas e.g. sunscreens

- Detection in tissue: yellow discoloration of teeth or sebum due to tetracycline

- Detection of fluorescent contents (photosensitizer in cosmotic & industrial agents)

6) Miscellaneous: Chromhidrosis

KOH in dermatology

Technique:

1- Collection: skin, nail, hair sample by scalpel at edge of glass slide

2- Then place on glass slide & cover by 10-20% KOH

3- Left for 15-20 min to dissolve hair debris & skin cells.

4- Heating slide gently to speed up KOH action.

5- Then add fluorescent material as calcofluor white & use fluorescence microscopy.

Uses:

1- Fungal infections: hyphae, arthroconida

2- TVC: spaghetti & meat ball appearance (clusters of yeast cells)

3- Candida albicans of vagina: hyphae surrounded by vaginal cells

4- Scabies: tunnel or borrow with vesicle at the end (adult mites, eggs)

5- Treatment of plane warts & MC

6- Diagnosis of deep fungal infections: Madura foot, Blastomycosis, Coccidiomycosis

PUVA

PUVA Photochemotherapy is the photochemical interaction between a psoralen medication & UVA (320-400 nm) radiation.

Mechanism of action:

1. Suppression of DNA synthesis
2. Anti-inflammatory & immunosuppressive
3. Stimulation of melanocytes

Methods of treatment:

- Oral PUVA: methoxalen in the dose of 0.6-0.8 mg/kg body weight orally followed by whole body irradiation after 1-3 hours.
- Topical PUVA: application of 8-MOP (0.1-0.01%) in creams, ointments or lotions, followed by UVA irradiation.

Indications:

- FDA-approved: psoriasis, vitiligo
- Others:

1. Neoplastic: MF
2. Papuloaquamous/dermatitis: AD, SD, LP, parapsoriasis, pityriasis lichenoides, GVHD
3. Photosensitivity dermatosis: PMLE, erythropitic protophorphyria, actinic dermatitis
4. Pruritic dermatosis: dermographism, chronic urticaria, urticaria pigmentosa,prurigo
5. Others: generalized granuloma annulare, pigmented purpuric dermatosis

Contraindications:

Absolute:

1. Pemphigus & pemphigoid
2. LE with photosensitivity
3. Xeroderma pigmentosa
4. Lactation
5. History of idiosyncratic reaction to psoralen

Relative:

1. Photosensitivity/photosensitizing medications
2. History or family history of melanoma
3. History of skin cancer
4. Pregnancy
5. Severe cardiac, liver, renal disease
6. Very young age

Adverse effects:

Short-term:

1. Phototoxic reactions: erythema, pruritus, tanning, keratitis, photo-onycholysis, hypertrichosis
2. Methoxsalen alone: GIT disturbances, CNS disturbances, hepatic toxicity, fever, exanthems
3. Others: cardiovascular stress, HSV recurrence, photosensitive eruptions

Long-term:

1. Photoaging,
2. Non-melanoma skin cancer,
3. Melanoma

Monitoring:

Base-line:

1. Cutaneous: exam. for cancers & premalignants lesions, biopsy from suspicious lesion
2. Ocular: gross, slit lamp, fundus examination
3. Lab: renal, liver functions, lupus laboratory panel

Follow up:

1. Cutaneous examination for cancers
2. Ocular examination

NB-UVB

UVB in the range of 310-315 nm, with a peak at 312 nm

Mechanism of action:

1. Reduction in DNA synthesis
2. Induces the expression of the tumor suppressor gene P53 → cell cycle arrest or apoptosis of KC
3. Immunosuppressive
4. Stimulate melanocytes proliferation, melanin production & migration

Advantages of NB-UVB over PUVA:

1. Safe use in children & pregnant women
2. No need for post-treatment eye protection
3. No drug induced nausea, no drug costs
4. Exposure time is ¼ of that of PUVA

Indications & contraindications: as PUVA

Side effects:

Short-term:

1. Skin: erythema, pruritus, bullae on psoriatic plaques, phototoxicity, PMLE
2. Mucosal: blepharitis, infections, recurrent HSV
3. Autoimmune: LE, pemphigus, pemphigoid

Long-term:

1. Photoaging,
2. Non-melanoma skin cancer
3. Melanoma

Photodynamic therapy

Administration of a photosensitizing agent followed by its photoactivation by light which then generates singlet oxygen within biologic tissue

Mechanism of action:

1. Photosensitizer →porphyrin + light activation → higher energy triplet state → singlet oxygen →apoptosis or necrosis of malignant cells
2. Induce immune-specific response
3. Target activated T-cells → treat inflammatory disorders
4. Increase collagen synthesis →treat photoaging

Photosensitizers:

1. Aminolevulinic acid (ALA)
2. Methylaminolevulinate (MAL)

Indications:

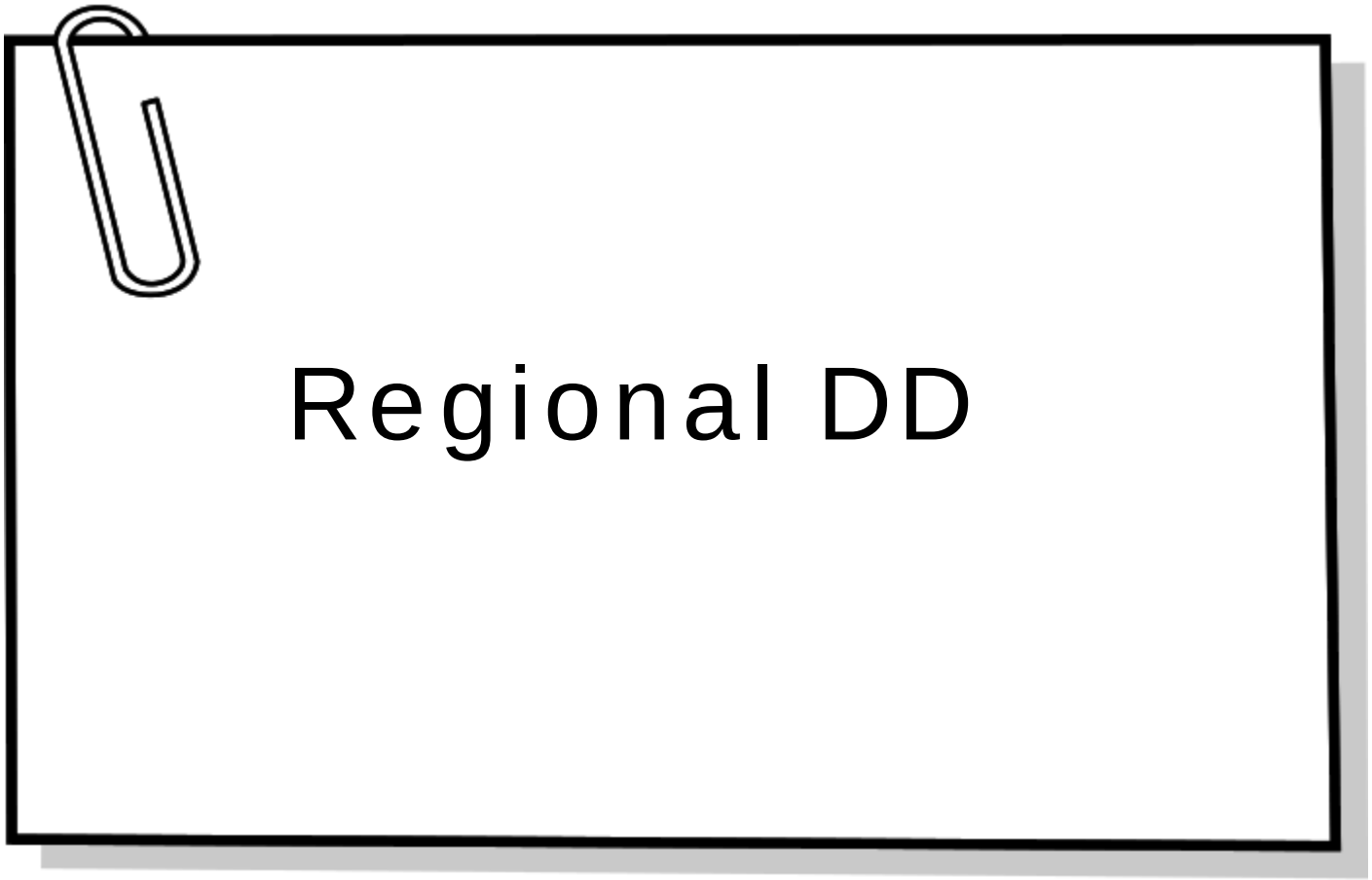
1. Photorejuvenation
2. Acne vulgaris
3. Verrucae
4. Actinic keratosis
5. Bowen disease
6. Superficial BCC
7. Nodular BCC

Side effects:

1. Photosensitivity, Allergy
2. Pain, Inflammation
3. Scarring, post inflammatory hyper or hypopigmentation

Contraindications:

1. Porphyria, hypersensitivity, allergy
2. Children < 8y


Regional DD

Regional differential diagnosis

Scalp:

I Hairy scalp:

A) Non-erythematous papules & plaques:

1. Since birth: organoid nevus
2. After puberty: pilar cyst, intradermal nevi
3. After 40 y: seborrhic keratosis

B) Pustules, crusts & exudation:

1. Contact dermatitis
2. Pediculosis
3. Kerion
4. Acne keloid & acne necrotica

C) Itching/scaling with or without erythema & crustation:

1. Pediculosis
2. Psoriasis
3. Seborrhic & atopic dermatitis
4. Contact dermatitis
5. Pityriasis amiantacea

D) Other dermatoses

1. Dermatitis herpetiformis
2. Lichen simplex chronicus
3. Malignant neoplasm: SCC, BCE
4. Metastatic tumors

II Hair loss

A) Non-cicatricial alopecia

a. Congenital

1. Progeria
2. Ectodermal dysplasia
3. Rothmund-Thomson syndrome
4. Netherton syndrome

b. Acquired

Diffuse :

1. Telogen effluvium
2. Anagen effluvium
3. Androgenetic alopecia
4. Endocrine: DM, hyperthyroidism
5. Drugs: anticoagulant
6. ↓ Zinc
7. Anemia
8. Chronic disease: SLE, malignancy

Localized:

1. Androgenetic alopecia
2. Alopecia areata
3. Trauma
4. Ringworm
5. Syphilis

B) Cicatricial alopecia:

- Congenital:

1. Aplasia cutis
2. Darier's disease
3. Epidermal nevi
4. Porokeratsis

- Traumatic:

1. Trauma
2. Burn
3. Radiation

- Infections:

1. Fungal: kerion- favus
2. Mycobacterial: LV- leprosy
3. Viral: HZ
4. Protozoa: leishmaniasis

- Tumors:

1. BCC
2. SCC
3. Metastasis

- CT:

1. DLE
2. DM
3. Morphea

- Others:

LP, CP, PG, acne keloidalis, pseudofolliculitis barbae , CTCL

Loss of outer one third of the eyebrow:

1. Leprosy
2. Myxedema
3. Trichotillomania
4. Alopecia areata

Ectropion

1. Congenital ichthyosiform erythroderma
2. Lamellar ichthyosis
3. Harlequin ichthyosis
4. PRP
5. Lupus vulgaris
6. Erythroderma
7. JEB (Herlitz)
8. DLE

Entropion

1. Cicatricial pemphigoid
2. SJS

Perioral:

1. Acrodermatitis enteropathica
2. Herpes simplex
3. Perioral dermatitis

Periorbital

1. Amyloidosis
2. Angioedema
3. Atopic dermatitis (infraorbital folds)
4. Dermatomyositis
5. Eyelid dermatitis
6. Hyalinosis cutis et mucosae
7. Kaposi sarcoma
8. Milia
9. Molluscum contagiosum
10. Sarcoidosis
11. Skin tags
12. Syringomas
13. Xanthelasma

Mouth:

Plaques:

1. Candidosis
2. Hairy leukoplakia (tongue)
3. Leukoplakia
4. Lichen plannus

Nodules

1. Carcinoma
2. Pyogenic granuloma

Vesicles or bullae

1. Erythema multiform
2. Herpes simplex, primary
3. Herpes zoster
4. Pemphigus vulgaris

Ulcers:

1. Aphthous ulcers
2. Behcet disease
3. Carcinoma
4. Histoplasmosis

Red face:

1. Flushing
2. Rosacea
3. Dermatitis (AD, CD, SD, photodermatitis, actinic dermatitis)
4. Physical erythema : ↑ temperature (burn) , ↓temperature (frost bite), UVR
5. Erysipelas
6. Connective tissue diseases: LE, DM
7. Metabolic: porphyria, hartnup
8. Genodermatosis: XP, Bloom's syndrome
9. Lymphoma

Flushing:

Widespread

1. Physiological: emotional, menopausal
2. Pathological: carcinoid syndrome, pheochromocytoma

Localized:

1. Urticaria
2. Rosacea
3. Erythromelalgea
4. Post-Raynauds

Malar rash

1- Actinic prurigo

2- Bloom's synddrome

3- Carcinoid syndrome flushing

4- Cockayne's syndrome

5- Contact dermatitis

6- Demidicosis

7- Dermatomyositis

8- Erythema infectiosum

9- Granuloma faciale

10- Jessner's lymphocytic infiltrate

11- Lupus erythematosus

12- Lupus pernio

13- Lupus vulgaris

14- Pemphigus erythematosus

15- Perioral dermatitis

16- Phototoxicity

17- Polymorphous light eruptions

18- Rosacea

19- Rothmund-Thomson syndrome

20- Seborrheic dermatitis

21- Telangiectasia macularis eruptiva perstans

Dusky red papulonodular lesion of face:

1. Sarcoidosis (lupus pernio)
2. Rosacea
3. Lupus vulgaris
4. Granuloma facial
5. LMDF
6. MF
7. EN
8. LE
9. kaposi sarcoma

Acneiform eruptions:

1. Epidermal growth factor receptor inhibitor
2. Radiation acne
3. Tropical acne
4. Acne aestivalis
5. Pseudoacne of tranverse nasal crease
6. Idiopathic facial granuloma
7. Perioral dermatitis
8. Pseudofolliculitis barbae
9. Acne keloidalis nuchae
10. Acne inversa
11. Childhood flexural comedones

Leonine facies:

1. Leprosy (LL)
2. Leishmaniasis
3. Sarcoidosis
4. Systemic amyloidosis
5. Lipoid proteinosis
6. Scleromyxedema
7. Lymphoma cutis
8. Leukemia cutis
9. Nodular masticytosis
10. Histiocytosis
11. Actinic dermatitis

Axilla lesions

1. Acanthosis nigricans
2. Apocrine gland neoplasm
3. Asymmetric periflexural exanthem
4. Axillary granular para keratosis
5. Contact dermatitis
6. Crowe's sign of neurofibromatosis
7. Cutis laxa
8. Dowling-Degos disease
9. Drug eruption
10. Erythrasma
11. Extramammary Paget's disease
12. Fox-Fordyce disease
13. Granulomatous slack skin
14. Hailey-Hailey disease
15. Hidradenitis suppurativa
16. Inverse pityriasis rosea
17. Inverse psoriasis
18. Lymphangiectasias

19. Pemphigus
20. Plane xanthoma
21. Pseudoxanthoma elasticum
22. Seborrheic dermatitis
23. Tinea versicolor
24. Trichomycosis axillaris

Skin diseases of breast & nipple:

1. Acanthosis nigricans
2. Bacterial mastitis
3. Basal cell carcinoma
4. Bowen's disease
5. Breast cancer, inflammatory
6. Candidiasis
7. Contact dermatitis, irritant or allergic
8. Darier's disease
9. Factitial
10. Hidradenitis suppurativa
11. Jogger's nipple
12. Leiomyomas
13. Lichen simplex chronicus
14. Lupus mastitis
15. Lupus panniculitis
16. Montgomery's tubercles
17. Morphea
18. Mycosis fungoides
19. Neurofibroma
20. Nevoid hyperkeratosis
21. Nipple eczema
22. Paget's disease
23. Papillary adenoma
24. Psoriasis
25. Radiation dermatitis

26. Seborrheic dermatitis
27. Seborrheic keratosis
28. Tuberculous mastitis
29. Warfarin necrosis

Inframammary lesion:

1. Candidiasis
2. Darier's disease
3. Hailey-Hailey disease
4. Inflammatory breast cancer
5. Intertrigo
6. Inverse psoriasis
7. paget's disease
8. Seborrheic dermatitis
9. Tinea corporis

Interdigital Web spaces:

1. Dermatophytosis
2. Erosio interdigitalis blastomycetica
3. Erythrasma
4. Gram-negative infectio
5. Interdigital hair sinuses
6. Intertrigo
7. Scabies
8. Soft corn xanthoma

Skin diseases of groin:

1. Acanthosis nigricans
2. Candidiasis
3. Contact dermatitis
4. Erythrasma
5. Extramammary Paget's disease
6. Hailey-Hailey disease
7. Intertrigo
8. Inverse pityriasis rosea
9. Irritant dermatitis
10. Langerhans cell histiocytosis
11. Mycosis fungoides
12. Pediculosis
13. Pemphigus foliaceus
14. Psoriasis
15. Pyoderma
16. Seborrheic dermatitis

Napkin rash:

1. Candidiasis
2. Seborrhic dermatitis
3. Psoriasis
4. Contact dermatitis
5. Perianal dermatitis
6. Miliaria
7. Syphilis
8. Acrodermatitis enteripathica
9. Impetigo
10. Hidradenitis suppuritiva

Diaper color:

1. Green : phenylketonuria
2. Black: alkaptonuria
3. Pink: congenital erythropoitic porphyria

Shin of tibia:

Itchy:

1. Lichen simplex chronicus
2. Hypertrophic lichen planus
3. Lichen amyloidosis
4. Prurigo nodularis

Non-itchy:

1. EN
2. NBL
3. Ecthyma
4. Pretibia myxedema

Knee:

1. epidermolysis bullosa
2. Psoriasis
3. Xanthoma tuberosum

Calf:

1. Erythema induratum of Bazin
2. Poplteal fossa:
3. Atopic dermatitis

Scrotum:

1. Angiokeratoma
2. Behcet disease
3. Calcinosis cutis
4. Condyloma
5. Contact dermatitis
6. Epidermal cyst
7. Extramammary Paget disease
8. Genital bilharziasis
9. Lichen simplex chronicus
10. Nevus
11. Scabies
12. Seborrheic keratosis

Neck:

1. Acanthosis nigricans
2. Berloq dermatitis
3. Contact dermatitis
4. Darier disease
5. Hailey-Hailey disease
6. Epidermal cyst
7. Folliculitis
8. Pseudofolliculitis
9. Impetigo
10. Pityriasis rosea
11. Poikiloderma of Civatte
12. Pseudoxanthoma elasticum
13. Scrofuloderma
14. Skin tags
15. Tinea
16. Warts

Hypopigmented macule on trunk:

1. Lichen sclerosis et atrophicus
2. Morphea
3. Vitiligo
4. Tuberculoid leprosy
5. Pityriasis alba
6. Post-inflammatory hypopigmentation
7. Nevus anaemicus
8. Nevus depigmentosus
9. Tinea versicolour
10. Idiopathic guttate hypomelanosis
11. Incontinentia pigmenti- fourth stage
12. Hypomelanosis of ito
13. Radiation dermatitis
14. Syphilis
15. Chemical
16. Albinism
17. Tuberous sclerosis
18. Phenylketonuria
19. Amelaotic melanoma
20. Scarring DLE

Serpiginous lesions:

1. Tinea corporis
2. Syphilis – 2ry, 3ry
3. Cutaneous larva migrans
4. Granuloma annulare
5. Elastosis perforans serpiginosa
6. Porokeratosis
7. Urticaria
8. Parapsoriasis
9. Ichthyosis linearis circumflexa
10. Ichthyosis hystrix
11. Incontinentia pigmenti
12. Erythema gyratum repens
13. Epidermal nevi
14. Erythema ab igne
15. Contact dermatitis

Nail colors:

1. Yellow: lymphedema, nicotine stains, onychomycosis
2. Orange- brown: hemochromatosis, Addison's disease, hyperthyroidism
3. Blue: Wilson's disease, cyanosis
4. Grey-brown: tetracycline, minocycline, argyria
5. Green : pseudomonas infection
6. Black: hemorrhage, melanoma
7. Salmon-orange: psoriasis
8. Half & half : renal disease

Nail manifestations	
Psoriasis	Pitting, oil drop, onycholysis, subungual hyperkeratosis
Lichen planus	Ridging, striations, twenty nail syndrome, pterygium
Alopecia areata	Pitting, longitudinal ridging, thicking
Sarcoidosis	Clubbing, onycholysis, subungual hyperkeratosis, , dystrophy, bone cysts
Dermatomyositis	Periungual telangiectasia with raged cuticle (Samitz sign)
Darier's disease	Red or white longitudinal bands, distal angular notch, onycholysis, fragility, subungual hyperkeratosis
Tuberous sclerosis	Subungual & periungual fibromas, longitudinal grooves, splinter hge, white streaks
Scleroderma	Pterygium inversus unguim, longitudinal over curvature
Acrodermatitis enteropathica	Chronic paronychia, dystrophic nails

Table 2. Nail involvement in lupus erythematosus (LE)

Histologically LE-specific nail disease:
- Discoid LE of the nail unit
- Hypertrophic LE
- Chilblains LE
- Lupus erythematosus unguium mutilans

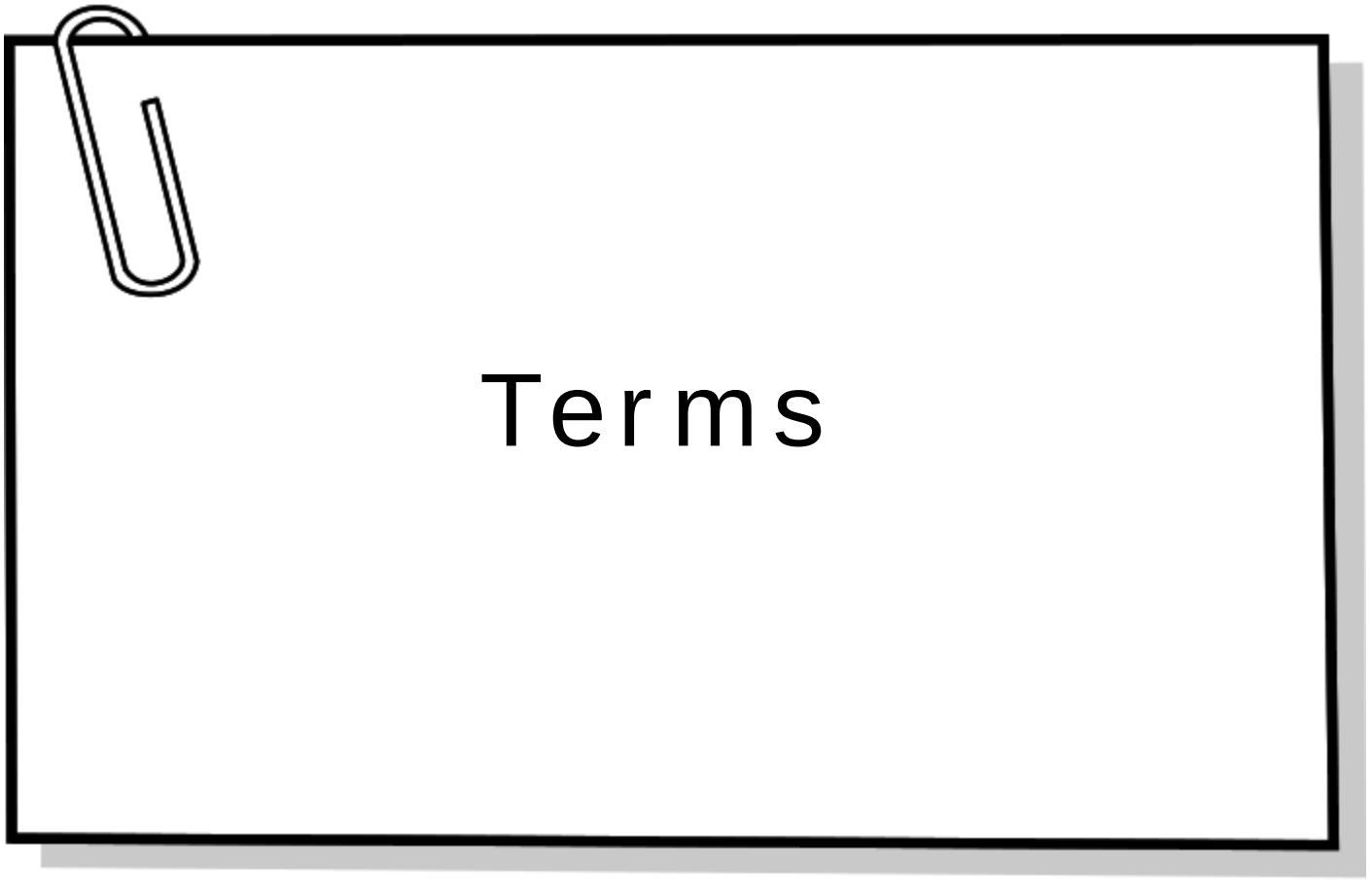
Differential diagnosis:
- Other causes of chronic inflammatory periungual disease with nail-plate dystrophy, eg, lichen planus

Histologically LE nonspecific nail disease:
- Leuconychia (punctate, striate)
- Nail pitting, ridging (Beau's lines)
- Onycholysis
- Nail dyschromia (diffuse, longitudinal)
- Nail-fold erythema
- Red lunulae
- Nail-fold hyperkeratosis, ragged cuticles, and splinter hemorrhages
- Vasculopathic lesions of the nail unit (vasculitis, microthrombotic)
- Pterygium inversum unguis (in Raynaud's phenomenon)

Differential diagnosis:
- Other connective tissue diseases with vascular involvement of the proximal nail fold, ie, scleroderma, dermatomyositis, mixed connective tissue disease, rheumatoid arthritis (nail-fold capillary microscopy)
- Drug-related disorder of the nails (dyschromia, onycholysis)
- Other unrelated, common disorders of the nails, eg, onycholysis of other origin (accidental, occupational, self-inflicted, *C. albicans*, onychomycosis, psoriasis, eczema)

Eye manifestations	
Recessive X-linked icthyosis	corneal opacities
AR Ichthyoses	ectropion
Darier's disease	corneal opacities or ulcers.
Rothmund-Thomson $& Bloom's syndrome	cataract
Xeroderma pigmentosa	photophobia, conjunctivitis, keratitis, corneal opacities
Tuberous sclerosis	retinal gliomas (phakomata) with no visual disturbances due to their peripheral location
Neurofibromatosis	lisch nodules, optic glioma, optic atrophy, proptosis & ptosis, congenital glucoma.
Pseudoxanthoma elasticum:	Angioid streaks of fundi of the eye: it is due to calcification of elastic fibers in the lamina elastica of Bruch's membrane → fissures & repeated he & exudate → degenerative changes in the retina (scar formation & pigment shifting) → progressive loss of vision.
SLE	blurring of disc margins, retinal hge & depigmentation, corneal involvement, keratoconjunctivitis sicca.
Dermatomyositis	heliotrope erythema affecting periorbital area, conjunctival edema, nystagmus
Lipoid proteinosis	beaded papules along the margins of the upper & lower eyelids (diagnostic)
Alkaptonuria	Brown pigment deposits in the sclera
PRP	lower lid ectropion
Herpes simplex	Keratoconjuntivitis , dendritic corneal ulcerations , scarring , blindness
HZ ophthalmicus	Eruption on upper lid , red & swollen conjunctiva, keratitis
Port-wine stain	Glaucoma, dilated conjunctival vessels, choroidal angioma

Kawasaki's syndrome	conjunctival congestion
Cicatricial pemphigoid	conjunctivitis, burning, entropion, trichiasis, corneal irritation, corneal neovascularization, scarring, fusion of palpebral & bulbar conjunctiva, symblepharon & blindness.
Seborrhic dermatitis	severe cases diffuse erythema & greasy scales of eye brows, eyelashes (marginal blepharitis & conjunctivitis).
Atopic dermatitis	eyelid eczema, recurrent conjunctivitis, Dennie-Morgan infraorbital fold, keratoconus, cataract, orbital darkening
SJS	symblepharon, conjunctival synechiae, entropion, ingrowth of eyelashes.
Sweet's syndrome	red eye (iritis, conjunctivitis)
Behcet's disease	conjunctivitis, scleritis, keratitis, uveitis, optic neuritis, glaucoma, cataract, hypopyon, retinal vasculitis, blindness.
Albinism	reduction in melanin within eye structures: translucent iris, relatively hypopigmented retina & fovea (photophobia , reduced visual acuity), misrouting of optic nerve fibers during development (strabismus, nystagmus, lack of binocular vision)
Vitiligo	ocular pigmentary abnormaities, loss of visual acuity, poor night vision, photophobia
Sarcoidosis	- Anterior uveitis : asymptomatic blurry vision, red eye painful, photophobia - Intermediate & posterior uveitis: painless blurry vision, floaters - Lid : dry, granulomas - Optic neuritis: blindness - Lofgren's $: EN + BHL+ acute iridicyclitis - Heerfordt's $: bell's palsy + parotid enlargement + anterior uveitis + fever - Parinaud oculoglandular $: conjunctivitis + ipsilateral lymphadenopathy
Rosacea	- Mild : scaling of eyelid margins - More active: blepharitis, conjunctival injection & cyst (chalazia) - Severe: keratitis, corneal neovascularization, uveitis, scleritis, iritis


Terms

Terms

- *Corps ronds & grains* : darier's disease
- *Church-spires:* Acrokeratosis verruciformis (Hopf), seborrhic keratosis
- *Cornoid lamella*: porokeratosis
- *Button hole sign:* neurofibromatosis
- *Angioid streaks :* pseudoxanthoma elasticum
- *Indians in a file :* pseudolymphoma
- *Figure of 8 (keyhole):* lichen sclerosis
- *Dermal silence:* SJS
- *Coat-sleeve-like:* erythema annular centrifugum
- *Flame figure:* Well's syndrome
- *Swiss-cheese appearance:* borderline leprosy, factitial panniculitis
- *Oil drop :* psoriasis
- *Saw-toothed appearance:* lichen planus
- *Claw clutching a ball:* lichen nitidus
- *Herald patch:* pityriasis rosea
- *Checkerboard parakeratosis:* PRP
- *Tombstone appearance:* pemphigus vulgaris
- *Spaghetti & meat balls:* pityriasis versicolor
- *En coup de Sabre:* morphea
- *Erythrodontia:* congenital erythropoietic porphyria
- *Apple jelly nodule:* lupus vulgaris
- *Donovan bodies:* leishmaniasis
- *Hairpin vessels:* keratoacanthoma
- *Tad poles:* syringoma


Collections

Band-like infiltrate:

1. MF
2. Secondary syphilis
3. Fungus
4. LP
5. Lichenoid eruptions

Hospitalization:

1. SJS
2. TEN
3. PV
4. Pustular psoriasis
5. Erythroderma

Positive ANA:

1. SLE
2. Other connective tissue disease
3. Phototherapy
4. Vascular disorders

Hypopyon level:

1. Subcorneal pustular dermatosis
2. IgA pemphigus

DD of sclerosing lymphangitis:

1. Venereal edema
2. Angioedema
3. Mondor disease: thrombophlebitis of dorsal vein

Scales:

1. Psoriasis--- laminated silvery white adherent
2. Pityriasis lichenoides chronica----mica scales
3. PVC---- cigarette paper
4. P. rosea--- collerete
5. DLE ---- adherent

Lichen planus of tongue:

1. Plaque
2. Erosive
3. Reticulated
4. Leukoplakia

Causes of ulcer in DLE:

1. Ulcerative type
2. SLE
3. Iatrogenic drug

Pernio:

1. Lupus pernio (sarcoidosis)
2. Pernio (chilblains)
3. Lupus pernio of hutchinson

Dermatomyositis with ulceration:

1. Vascular changes
2. PG
3. Calcinosis cutis

Use of emollients after complete cure:

1. AD
2. PPK
3. Ichthyosis
4. Psoriasis
5. PRP
6. Napkin dermatitis
7. Chronic eczema
8. Shaping
9. Xeroderma

Itching is pathognomonic in :

1. Prurigo nodularis
2. Hypertrophic LP
3. DH
4. Scabies
5. Tinea cruris
6. Mastocytosis
7. Urticaria

Hypopigmented MF:

1. Child
2. Back, buttocks

Hydropic degeneration of basal cell layer:

1. LP
2. DM
3. LSA
4. DLE

ESR > 100

1. TB
2. Collagen disease
3. Malignancy

Role of X-ray in dermatology

1. Before ttt: MTX, biologic, steroid
2. Genodermatosis: TS, NF
3. Certain diseases: TB, EN, sarcoidosis
4. Therapeutic: favus, acne keloidalis

Androgen depended dermatosis:

1. AV
2. AGA
3. Seborrhic ermatitis
4. Hirsutism
5. Fox fordyce
6. Becker's melanosis
7. Hidraenitis supp.

In psoriasis:

1. Nail
2. Arthropathy } MTX
3. Erythrodermic
4. Pustulare → acitritin

Diseases healed by scarring

1. Favus
2. Kerion
3. DLE
4. Ecthyma
5. EB
6. LV
7. PCT

Drug of choice:

1. Tinea capitis: griseofulvin
2. Tinea corporis: Allylamine
3. Tinea cruris: Allylamine
4. PVC: itraconazole, fluconazole
5. VVC: fluconazole
6. Tinea pedis: itraconazole

Grenz zone:

1. Granuloma facial
2. LL
3. Sezary syndrome
4. Lymphocytoma cutis

Asteroid bodies:

1. Leprosy
2. Sarcoidosis
3. TB
4. Sporotrichosis

Strict unilateral dermatosis:

1. HZ
2. Zosteriform LP
3. Nevus unis latralis
4. Lymphangioma circumscriptum
5. Segmantal vitiligo
6. Becker's melanosis
7. Nevus of Ota & Ito
8. Zosteriform lentigenous nevus

Types of anemia with MTX:

1. Aplastic anemia
2. Megaloplastic anemia

Diseases caused by cats:

1. Bacterial : cat scratch disease, cellulitis, abscess
2. Mycobacterial: TB
3. Parasitic: scabies, leishmaniasis
4. Fungal: dermatophytes
5. Others: atopic dermatitis, contact dermatitis, urticaria

Cigarette paper scar :

1. 3ry syphilis
2. Ehler-Danlos syndrome
3. MF
4. LS
5. Stria distensae
6. Poikiloderma atrophicans vasculare

Cigarette paper scales:

1. PVC
2. P. Rosea

Positive Nikolsky sign:

1. SSSS
2. PV
3. TEN

Fillagrin defect:

1. AD
2. Ichthyosis
3. Rosacea

Venereal bacterial infections:

1. Chancroid
2. Granuloma inguinal
3. LGV
4. Gonorrhea
5. Syphilis

Neutrophilic dermatosis associate with bowel disease:

1. Behcet's disease
2. IBD
3. Bowel associated dermatosis arthritis syndrome

Urticarial wheal > 24h :

1. Urticarial vasculitis
2. Urticarial drug eruption

Poikiloderma :

1. DM --- violaceous
2. LE ------ red

Pathergy test :

1. Behcet's disease
2. PG
3. Sweet's syndrome
4. Wegner granulomatosis

Kogoj microabscesses

1. Reiter's disease
2. Candidiasis
3. PRP
4. Geographic tongue
5. Keratoderma blenorrhagia

Giant cells:

1. Totun
2. FB
3. Langhans
4. Reed sturnberg
5. Multinucleated epidermal
6. Balloon cells
7. Giant nevus cells

Antibodies:

1. Anti-ds DNA = Native DNA= lupus nephritis
2. Anti-RNP = MCTD
3. Anti smith = SLE
4. Anti histone = drug induced
5. Anti Ro, anti La = SCLE, Neonatal LE

* Terminal amino peptide procollagen type 1 = morphea

* Terminal amino peptide procollagen type 3 = MTX monitoring

Hyperpigmentation along Blaschko's lines:

1. Café-au-lait macules in McCune-Albright syndrome
2. Early epidermal nevus
3. Focal dermal hypoplasia incontinentia pigmenti, stage III
4. Linear & whorled nevoid hypermelanosis
5. Linear atrophoderma of Moulin
6. Linear biphasic cutaneous amyloidosis
7. Linear fixed drug eruption
8. Linear lichen planus
9. Progressive cribriform & zosteriform hyperpigmentation
10. X-linked chondrodysplasia punctata
11. X-linked reticulate pigmentary disorder

Christmas-tree pattern:

1- Erythema dyschromicum perstans.
2- Lichenoid drug eruption.
3- Kaposi sarcoma.
4- Pityriasis lichenoides.
5- Pityriasis rosea.
6- Sign of Lesar-Trelat.

Flame Figures:

1. Arthropod bite reaction
2. Bullous pemphigoid
3. Drug reaction
4. Eczema
5. Hypereosinophilic syndrome
6. Parasitic infestation
7. Tinea
8. Well's syndrome

Anesthetic lesion:

1. Congenital sensory neuropathy
2. Leprosy
3. Necrotizing fasciitis
4. Neuropathic ulcer
5. Syringomyelia
6. Tabes dorsalis
7. Trigeminal trophic syndrome

Halo:

1. Lymphomatoid papulosis
2. Melanoma
3. Neurofibromas
4. Nevus
5. Psoriasis
6. Sarcoidosis

Targetoid lesions:

1. Giant urticaria
2. Fixed drug eruptions
3. SCLE
4. Kawasaki disease
5. Erythema annulare centrifugum
6. Several forms of vasculitis

Foam cells:

1. Atypical fibroxanthoma
2. Balloon cell melanoma
3. Balloon cell nevus
4. Dermatofibroma
5. Granular cell tumor
6. Hibernoma
7. Juvenile xanthogranuloma
8. Langerhans cell histiocytosis
9. Lepromatous leprosy
10. Liposarcoma
11. Malacoplakia
12. Necrobiotic xanthogranuloma
13. Pneumocytosis
14. Rhinoscleroma
15. Sebaceous gland tumors
16. Verruciform xanthoma
17. Xanthoma disseminatum
18. xanthomas

Facial sparing:

1- Lichen planus.
2- Mastocytosis.
3- Parapsoriasis.
4- Pityriasis rosea.
5- Psoriasis.
6- Scabies.

Superantigen in dermatology:

1- Staphylococcal toxic shock syndrome.
2- Streptococcal toxic shock syndrome.
3- Toxic shock syndrome-like exanthematous disease.
4- Recalcitrant erythematous desquamating disorder.
5- Kawasaki disease.
6- Cutaneous T-cell lymphoma.
7- Psoriasis.
8- Atopic dermatitis.
9- Recurrent toxin-mediated perineal erythema.
10- Staphylococcal scalded skin syndrome.
11- Sweet's syndrome.
12- Autoeczematization (Id) response.
13- Scarlet fever.

Salt & pepper appearance in dermatology

Skin :

- Systemic sclerosis
- Repigmented vitiligo

Fundus:

- Congenital syphilis
- Congenital rubella

Erythema	ab igne
	annular centrifugum
	chronicum migrans
	dyschromicum
	perstans
	elevatum diutinum
	gyratum repens
	induratum of Bazin
	infectiosum
	marginatum
	rheumaticum
	multiforme
	necrolytic acral
	necrolytic migratory
	neonatorum
	nodosum
	nodosum leprosum
	nodosum migrans
	palmar
	toxicum neonatorum

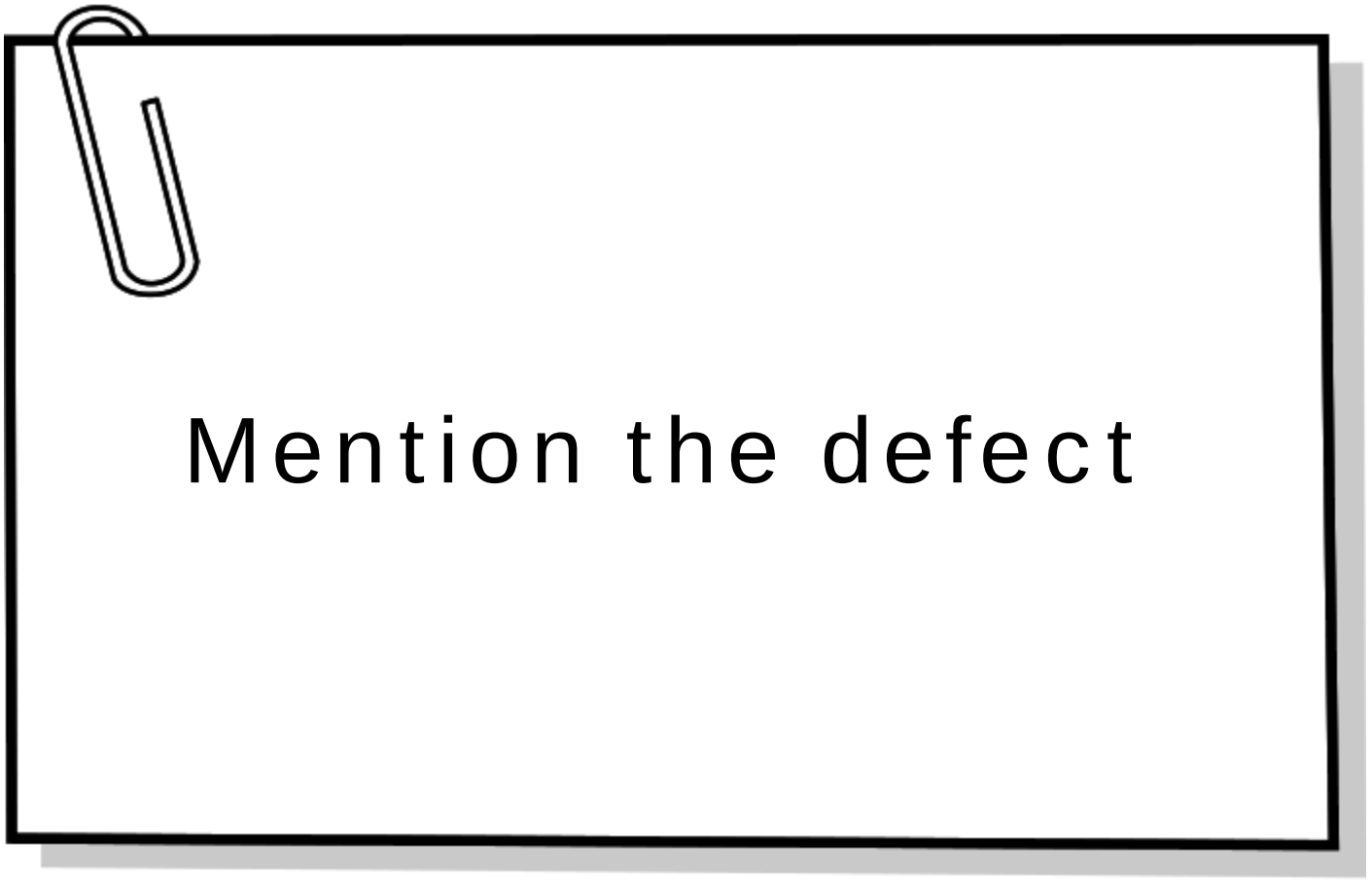
Pityriasis	alba
	amiantacea
	lichenoides
	rosea
	rotunda
	rubra pilaris
	versicolor

Lichen	planus
	aureus
	amyloidosis
	nitidus
	striatus
	sclerosus et atrophicus
	myxedematosus
	scrofulosorum
	simplex chronicus
	spinulosus
	verrucosus et reticularis

Acne	Vulgaris
Ichthyosis	
Impetigo	
Lupus	
pemphigus	
Psoriasis	
Sycosis	
verruca	

Lupus	erythematosus
	miliaris disseminatus faciei
	pernio
	vulgaris

Hutchinson in dermatology		
1	Hutchinson's sign	Vesicles on the tip or side of the nose, precedes the development of ophthalmic herpes zoster Melanonychia with pigmentation of the proximal nail fold
2	Hutchinson's triad	pattern of presentation of congenital syphilis: interstitial keratitis Hutchinson incisors and eighth nerve deafness.
3	Hutchinson's teeth	smaller and more widely spaced incisors which have notches on their biting surfaces
4	Hutchinson's disease	Uncommon, inherited vascular ectasia predominatly affects females , grouped punctate vascular macules & papules most commonly on the lower extremity.
5	Hutchinson's melanotic freckle	melanoma in situ, unevently pigmented, irregularly bordered macule or patch on the face & other sun exposed areas.
6	Hutchinson's patch	Salmon-colored area in the cornea seen in syphilitic keratitis
7	Hutchinson's prurigo	chronic dermatosis affecting children that is caused by abnormal reaction to UVR , pruritic , photodistributed, papules, vesicles & plaques with cheilitis & conjunctivitis.
8	Hutchinson-Gilford Progeria Syndrome	rare premature aging syndrome, death in the 1st two decades due to coronary atherosclerosis, dwarfism, paucity of SC fat, enlarged head with characteristic facies, atrophic skin, prominent SC veins, sclerodermatous changes on the extremities.
9	Hutchinson's dehidrosis	


Mention the defect

Mention the defect in:

Lipoid proteinosis	Mutations in extracellular matrix ptn 1 gene
X-linked dominant protoporphyria	↓ ALA synthase 2
ALA dehydratase deficiency porphyria	↓ ALA dehydrase
Acute intermittent porphyria	↓ Porphobilinogen deaminase
Congenital erythropoitic porphyria	↓ Uroporphyrinogen III synthase
Porphyria cutanea tarda	↓ Uroporphyrinogen decarboxylase
Hereditary coproporphria	↓ Coproporphyrinogen oxidase
Variegata porphyria	↓ Protoporphyrinigen oxidase
Erythropoietic protoporphyria	↓ Ferrochelatase
Acrodermatitis enteropathica	AR, mutations in gene encode zinc transport
Phenyl ketonuria	AR, ↓ phenylalanine hydroxylase enzyme
Tyrosinemia type II	AR, absence of tyrosine aminotranferase
Alkaptonyria	AR, absence of homogentisic oxidase
Hartnup disease	AR, failure of transport & absorption of tryptophan
Ichthosis vulgaris	AD, ↓ Serine protease
Ressive X-linked ichthyosis	Deletion of STS gene →↓ steroid sulfatase
Epidermolytic ichthyosis	AD, Point mutations in KRT1, KRT 10
Superficial epidermolytic ichthyosis	AD, KRT2 mutations
Ichthyosis en confetti	AD, KRT 10 gene mutation
Ichthyosis hystrix Curth-Macklin	KRT1 mutation
Sjogren- Larisson syndrome	AR, ↓ fatty aldehyde dehydrogenase
Netherton syndrome	AR, SPINK5 gene defect
PIBIDS syndrome	Markedly deficient sulfur content of hair
Refsum's syndrome	Mutations in phytanoyl- CoA hdroxylase gene & peroxisome biogenesis factor 7 gene
Dorfman-Chanarin syndrome	AR, ↓ long chain ligase
Darier's disease	AD, mutations in ATP2A2 gene
Dyskeratosis congenital	Mutation in DKC 1 gene (XLR) Genes encode telomerase (AD)
Rothmund-Thomson syndrome	AR, mutation RECQL4 (DNA helicase)
Bloom syndrome	BLM gene mutation
Cockayne syndrome	AR, defective excision repair
Xeroderma pigmentosa	AR, ↓ DNA endonuclease
Tuberous sclerosis complex	Mutation TSC1, TSC2 genes
Neurofibromatosis 1	Mutation NF-1 gene
Neurofibromatosis 2	Mutation NF-2 gene
Pseudoxanthoma elasticum	Mutation ABCC6 gene which encode MRP6
Incontinentia pigmenti	XLD, mutation in NEMO gene
Angiokeratoma corporis diffusum	XLR, ↓ alpha-galactosidase enzyme
Nevus comidonicus	FGFR2 mutation
Gardner's syndrome	AD, adenomatous polyposis coli gene
Muir-Torre syndrome	AD, DNA mismatch repair genes
Peutz-Jeghers syndrome	AD, mutation in gene encode serine-threonine kinase
Chediak-Higashi syndrome	AR, lysosomal trafficking regulation gene
Familial hypercholesterolemia	AD, ↓ LDL receptor
Kindler syndrome	AR, kindling-1 ptn defect
Hailey-Hailey disease	AD, ATP2C1 gene mutation